

1 IN THE UNITED STATES DISTRICT COURT

2 EASTERN DISTRICT OF TENNESSEE

3 AT WINCHESTER

4 CINCINNATI INSURANCE COMPANY, :

5 Plaintiff/Counter-Defendant, :

6 v. :

4:12-CV-32

7 LARRY BANKS and WANDA SUE BANKS, :

8 Defendants/Counter-Plaintiffs: :

9 Chattanooga, Tennessee

10 November 8, 2013

11 BEFORE: THE HONORABLE BILL CARTER
12 UNITED STATES MAGISTRATE JUDGE

13 APPEARANCES:

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23 JURY TRIAL
24 FOURTH DAY OF TRIAL
25

UNITED STATES DISTRICT COURT

INDEX OF PROCEEDINGS

MARK SELLS

Direct Examination by Mr. Chastain.	472
Cross-Examination by Mr. McWherter.	581
Redirect Examination by Mr. Chastain.	672

CHRISTINE FORAN

Direct Examination by Mr. Ferrell	689
Cross-Examination by Mr. Scott.	728
Redirect Examination by Mr. Ferrell	735

EXHIBITS

436	Photograph (kitchen)	507
437	Photograph (Bedroom 2 and closet)	526
438	Photograph (hallway)	529
439	Photograph (heavy equipment)	531
440	Photograph (equipment, front wall removed)	532
441	Photograph (clothing)	541
442	Photograph (debris pile)	549
443	Photograph with markings by Sells	652
444	Photograph	654

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THE COURT: Well, good morning to all. And I believe we are ready to proceed. I believe Cincinnati was about to call a witness.

MR. CHASTAIN: Yes. Cincinnati calls Mark Sells, Your Honor.

(Brief pause.)

1 MARKS SELLS,
2 called as a witness at the instance of the plaintiff, having
3 been first duly sworn, was examined, and testified as
4 follows:

5 DIRECT EXAMINATION

6 BY MR. CHASTAIN:

7 Q Would you introduce yourself to the Court and jury,
8 please?

9 A Yes. Mark Sells.

10 Q And, Mr. Sells, what do you do for a living right
11 now?

12 A I'm a fire investigator.

13 Q For whom?

14 A With Metro Nashville Fire Department. And I'm also
15 the owner of Firetraks Investigation.

16 Q All right. I want -- I want to focus in
17 particularly on what you did with respect to the Banks claim,
18 and then we'll go talk about your experience and observations
19 that you brought to your work in the case. What did you do
20 with respect to the house fire at the 1810 Sycamore Circle
21 property back in November of 2011?

22 A My assignment was to conduct a cause and origin
23 investigation to determine the cause and origin of the fire.

24 Q All right. What does the word cause mean?

25 A What actually happened to ignite the fire.

1 Q And what's the word origin mean?

2 A The area that the fire occurred in.

3 Q All right. Now, I want to talk to you about what
4 you did. And you've given us a copy of your curriculum vitae,
5 which is marked as Exhibit 103. Is that correct?

6 A Yes.

7 Q And I'd ask you if that's your CV? (Indicating.)

8 A Yes, sir.

9 Q All right. How long have you been involved in cause
10 and origin investigations?

11 A I began in 1999, actually '98. I became certified
12 in 1999 as a fire investigator.

13 Q What do you mean you became certified?

14 A Throughout testing and on-scene time, I took a test
15 and was certified by the National -- by NAFI, is what it's
16 called.

17 Q And what does NAFI stand for?

18 A National Association of Fire Investigators.

19 Q All right. And what are you certified as? What is
20 the name of your certification?

21 A Fire and explosion investigator.

22 Q All right. And when did you obtain that
23 certification?

24 A 1999.

25 Q And has it been current through today?

1 A Yes, sir.

2 Q Do you also hold any other Tennessee licenses?

3 A Private investigator license.

4 Q And why do you hold a Tennessee private investigator
5 license?

6 A It's required by the state of Tennessee to conduct
7 investigations.

8 Q Do you have to have a private investigator's license
9 if you work for a governmental entity?

10 A No, sir.

11 Q All right. It's just if you're in private practice?

12 A Correct.

13 Q Now, what did you do before you became a cause and
14 origin investigator?

15 A I was a firefighter.

16 Q And what did you do even-- Let's go back a little
17 bit further than that. Do you have any military experience?

18 A Yes, sir. Before I became a firefighter, I was in
19 the United States Army.

20 Q And for how many years were you in the Army?

21 A Five and a half.

22 Q Now, how long were you a firefighter?

23 A Oh, eight years.

24 Q And in your role today as a cause and origin
25 investigator, a fire investigator with -- did you say Metro

1 Nashville?

2 A Yes.

3 Q Do you still fight fires?

4 A No, sir.

5 Q And can you give us an estimate of how many fires
6 you fought as a fireman?

7 A Oh, over a thousand.

8 Q All right. And I know we'll talk about this in a
9 little bit more detail, but can you give us an estimate of how
10 many fires you've been involved in where you've investigated
11 the cause and origin?

12 A Approximately 2000.

13 Q Now, when you fought fires, would you be able to
14 make observations about fire scenes and how fires progressed?

15 A Yes.

16 Q Would you be able to make observations about what
17 materials did and did not survive fires?

18 A Yes.

19 Q And in all of the fires that you talked about, did
20 you make those observations?

21 A Yes, to some degree, yes, sir.

22 Q All right. Do you continue, as a fire investigator,
23 to make those types of observations?

24 A Absolutely.

25 Q Is it more so as a fire investigator perhaps?

1 A Yes.

2 Q All right. Let me ask you some other questions. As
3 a fire investigator, do you ever dig through debris?

4 A Every time.

5 Q What's the purpose of digging through debris?

6 A It would actually get you to the floor level, which
7 puts you at more conditions of how the structure might have
8 been prior to the fire.

9 Q When you are digging through debris, do you
10 sometimes look for contents items that are in the debris?

11 A Every time.

12 Q And, generally speaking—we're going to talk
13 specifically and see pictures about what you did in this case,
14 but—tell the jury how you dig through debris to look for
15 contents.

16 A Depending on the destruction that the fire caused,
17 you want to layer debris, and what that'll do-- If we had a
18 full structure, when it collapses, it's still the full
19 structure, but it's just in a shorter form. So you can take
20 the debris and the top debris will be your roof, most of the
21 time, then you can just layer down, and you'll -- eventually
22 you'll end up at floor level.

23 Q What about -- if you're looking for small things in
24 the debris, do you do anything different?

25 A I will-- It's a more detailed layering. It can be

1 called sifting. I usually use a small trowel, concrete
2 trowel, small garden shovel, something like that, to actually
3 go through to find smaller items.

4 Q Now, based upon your experiences and your
5 observations at fire scenes, when there is a fire in a house,
6 for instance, does everything in that house completely burn?

7 A Absolutely not.

8 Q Now, let's go through some of your experience if I
9 can. All right. And in what year did you tell me you started
10 being a fire investigator?

11 A I started assisting in fire investigations 1997-'98.

12 Q And that's when you were with the city of LaVergne?

13 A Yes, sir.

14 Q All right. And did you have supervision and
15 training when you did that?

16 A Oh, yes. Yes.

17 Q All right. And what did you do next? After you
18 left the city of LaVergne, where did you go?

19 A To the city of Franklin, Tennessee.

20 Q All right. And what was your title at the city of
21 Franklin.

22 A Assistant fire marshal.

23 Q Did you conduct fire scene investigations?

24 A Yes.

25 Q And is that when you obtained your certification?

1 A Yes, sir.

2 Q And that's certified fire and explosion
3 investigator?

4 A Correct. Yes.

5 Q And is that also when you got your private
6 investigator license?

7 A No, sir.

8 Q When did you get your private investigator license?

9 A 2008.

10 Q Okay. We'll get to that. All right. After you
11 left the city of Franklin, what did do you?

12 A After the city of Franklin, I was employed by Knox
13 County fire marshal's office.

14 Q All right. And tell me some of the things that you
15 did with the Knox County fire marshal's office.

16 A My only responsibility with Knox County was fire
17 investigations.

18 Q Did you have any teaching responsibilities there
19 while you were at Knox County?

20 A Yes, sir.

21 Q And where did you teach?

22 A I taught with the National Forensic Academy at the
23 University of Tennessee.

24 Q Did you teach any classes specifically focusing on
25 evaluation of fire scenes for contents?

1 A Yes, sir.

2 Q And did you explain the procedures to those people
3 that took your classes, similar to what you're going to
4 explain to the jury today?

5 A Yes.

6 Q All right. After Knox County where did you go?

7 A I came back to the city of LaVergne as the fire
8 marshal.

9 Q All right. And, again, did you conduct fire scene
10 examinations?

11 A Yes.

12 Q And then what did you do?

13 A I got into the private side of the investigations,
14 fire investigations. I did the -- did that for five years.

15 Q All right. And what was the first company that you
16 worked with on the private side?

17 A EFI Global.

18 Q All right. Now, was that when you obtained your
19 private investigator license?

20 A Yes.

21 Q And then after EFI what did you do?

22 A I went out on my own and started my own private
23 investigation company.

24 Q And is that what you called Firetrak Investigations?

25 A Yes.

1 Q And then at some point, looks like this year, you
2 became employed by the Metropolitan Nashville Fire
3 Department --

4 A That's correct.

5 Q -- as a fire investigator?

6 A Yes.

7 Q And in all those positions where you're doing fire
8 scenes investigations, through all that experience we looked
9 at on your CV, are you continuing to make observations of the
10 types of debris that survive and do not survive fires?

11 A Absolutely.

12 Q And today, sitting here testifying, do you -- even
13 though you're working for the metro government in Nashville,
14 do you still maintain your private investigator's license?

15 A I do.

16 Q Are there organizations that fire investigators such
17 as yourself should belong to, I guess?

18 A Yes.

19 Q And what are those organizations?

20 A I -- personally I belong to the International
21 Association of Arson Investigators, I belong to the Tennessee
22 Committee on Arson.

23 Q All right. And that International Association of
24 Arson Investigators, is that what -- I don't know if we've
25 heard this yet or not, but I-double A-I?

1 A Yes, that's correct.

2 Q All right. I want to move now and talk about what
3 you did for the Banks claim. Okay?

4 A Okay.

5 Q Generally speaking, you've told us you do a cause
6 and origin investigation. Give us a broad overview of what
7 you do.

8 A When we arrive at a structure that's suffered a fire
9 loss, we do a 360 around the building. That means we walk and
10 look at each side, see where the fire may have vented. Doing
11 that, we can tell if the fire originated exterior of the
12 building or interior. If it happened interior, we'll then
13 enter the building at -- where the least amount of damage was
14 done, we enter there, we work to the area of the most damage.
15 And by doing so we can -- we're able to tell the origin and
16 cause of the fire.

17 Q Are there certain scientific principles or fire
18 investigation principles that guide what you do?

19 A Yes, sir, there's a scientific method.

20 Q All right. And can you tell the ladies and
21 gentlemen of the jury, as it applies to fire scene
22 investigation, what that scientific method is?

23 A Yes. First off, you define the problem. That would
24 mean that a fire has occurred. Secondly you recognize the
25 need, and that will tell us that there is a need to

1 investigate the fire to determine what happened. You start
2 collecting your data, try to find facts that may apply to the
3 fire. You apply that data to see which -- what data and facts
4 are consistent with what happened at the fire. You form a
5 hypothesis; that's an educated guess as to what happened. You
6 start testing those hypotheses as to see which one actually
7 could have happened in regards to this fire. Then you --
8 finally you select a final hypothesis that fits the scenes
9 after all the testing's been done, and you come to one
10 conclusion.

11 Q And is that conclusion that you come to what we call
12 your opinions in this case?

13 A Yes, sir. Yes, sir.

14 Q All right. Are there any guidelines for fire
15 investigators in the industry that incorporate the scientific
16 method you just described and give more detail on things that
17 you should look for in fire investigations?

18 A Yes, there is.

19 Q And what is that called?

20 A That's NFPA 921 guide for fire investigations.

21 Q I know the jury is probably going to get a
22 black-and-white copy of this, but is this the document that
23 you're talking about? (Indicating.)

24 A Yes.

25 Q And was your investigation in this case conducted in

1 accordance with the guides put forth in the NFPA 921 Guide for
2 Fire and Explosion Investigations?

3 A Yes, it was.

4 Q All right. Let me show you--

5 Put the board up, please.

6 And while she is putting that up, Mr. Sells, let me
7 ask you, did your investigation follow the scientific method
8 as put forth in FPA 921?

9 A Yes, it did.

10 Q Is this basically a summary of the scientific method
11 you just described?

12 A It is. Yes.

13 Q All right. I want to use that as we go through for
14 the jury an outline of going through the steps. Did you
15 follow those steps in order?

16 A Yes.

17 Q And is it important to follow them in order?

18 A It is, yes.

19 Q All right. Let's -- so that we can get some context
20 for more of the questions, can you give us your opinion as to
21 the cause and origin of this fire?

22 A The cause and origin-- It's an incendiary fire.
23 The origin would be in the area of the master bedroom.

24 Q Okay. We'll look at some pictures in a minute, but
25 for the jury's benefit, what does the word incendiary fire

1 mean?

2 A It means it was an intentionally set fire.

3 Q All right. Let's go through the scientific method.

4 I think the first couple you may have already talked about.

5 Recognizing the need. What was the need?

6 A A fire had occurred.

7 Q All right. What's the second step?

8 A Define the problem.

9 Q All right. And what was the problem?

10 A That a fire had occurred and a cause and origin
11 investigation needed to be conducted.

12 Q All right. And were you hired to do that?

13 A Yes, sir.

14 Q And who were you hired to do that investigation by?

15 A Cincinnati Insurance.

16 Q Were you hired to take statements from Mr. or
17 Mrs. Banks?

18 A No, sir.

19 Q Did you actually at some point get to talk to Mr. or
20 Mrs. Banks?

21 A Briefly.

22 Q Okay. Did you understand that someone else was
23 going to take a statement from Mr. and Mrs. Banks?

24 A Yes.

25 Q All right. As we go, as we continue to define the

1 problem-- What day were you hired on?

2 A I believe that would have been November 28th.

3 Q That was the date of the fire.

4 A Okay. So it would have been November 29th that I
5 actually received the assignment. I believe that's right.

6 Q All right. At some point—and we'll jump ahead a
7 little bit—did you go to the fire scene?

8 A Yes, I did.

9 Q And does that move us into Stage 3 of the scientific
10 method—collecting the data?

11 A Very beginning, yes.

12 Q All right. Now, when does the analysis of the data
13 occur?

14 A Generally after you have processed the scene and
15 you've -- you've gathered your facts that apply to the fire.

16 Q All right. Tell me some of the things that you do
17 back on Stage 3 of the scientific method to collect data.
18 What types of data do you collect?

19 A Well, there's physical data, which could be the
20 fire -- anything found in the fire scene itself, also talking
21 to neighbors, any witnesses, firefighters, things of that
22 nature.

23 Q And are those types of information and data that are
24 commonly relied upon by experts in your field when they are
25 developing their opinions as a result of the scientific

1 method?

2 A Yes.

3 Q Now, tell the jury how many hours you spent at the
4 fire scene overall. Well, let's just focus in November and
5 December first of all.

6 A I believe there was actually somewhere around 80
7 hours of total scene work involved in this fire.

8 Q All right. And were you actually on the property
9 for several days?

10 A Yes.

11 Q All right. And you've told us about generally
12 walking around. What other things -- we're going to get real
13 specific in a minute, but what other things did you do at the
14 property?

15 A Can you be more specific?

16 Q All right. Well, I'll tell you what --

17 A There's a lot of things.

18 Q We'll get to that. Okay. We'll just skip that one
19 for now. Does the NFPA talk about appropriate methods and
20 data collection techniques?

21 A Yes.

22 Q Let me show you Section 4.3.3. And can you tell us
23 the types of different data that the NFPA references? Just
24 read that section for us.

25 A "Observation, Experiment, and Other Direct

1 Data-Gathering Means."

2 Q All right. Does the NFPA then talk about how the
3 site inspection is supposed to be conducted?

4 A As far as to?

5 Q Gathering data.

6 A Yes.

7 Q Okay. If you would, let me ask you again to look at
8 Section 4.4.3.1. If you would, read this section into the
9 record, please.

10 A "It is during this stage of the investigation that
11 the examination of the incident fire or explosion scene is
12 conducted. The fundamental purpose of conducting the
13 examination of any incident scene is to collect all valuable
14 data --"

15 Q Goes over to the top.

16 A "-- and document the incident scene. The
17 investigator should conduct an examination of the scene and
18 its available collection data necessary to the analyst."

19 Q Read that last sentence again. I think you may have
20 missed a word. Let me --

21 A "The investigator should conduct an examination of
22 the scene, if it is available, and collect data necessary to
23 the analyst -- to analyze."

24 Q All right. And was the fire scene available for
25 you?

1 A Yes, it was.

2 Q And did you do what the NFPA guides you to do?

3 A I did.

4 Q And is that part of your overall understanding of
5 the scientific method before the 2011 edition of the NFPA 921
6 came out?

7 A Yes.

8 Q Is that the way that you've done your fire scene
9 investigations since you began doing them?

10 A Yes.

11 Q Now, why is it important for a fire scene
12 investigator to actually go to the site?

13 A So he can actually see the entire site.

14 Q Are there things that you can see when you're on
15 site and understand that you can't see simply through pictures
16 or videotapes?

17 A Oh, absolutely, yes.

18 Q Give the jury an idea of what type of things those
19 would be.

20 A I just-- If you're only looking at pictures, you're
21 only seeing a two-dimensional caption of what the scene is. A
22 3-D site, you can see depth of the burn, you can see certain
23 patterns that the fire may have done. And there's just no
24 comparison, in my mind, between actually being on the scene
25 versus looking at some pictures.

1 Q Does the NFPA talk about areas from which data
2 should be collected during this stage of the scientific
3 method?

4 A It does.

5 Q Let me show you Section 18.3. Can you read that
6 section for us, please?

7 A Sure. "The data collection process for the cause of
8 determin- -- determination includes identifica- --
9 identification of fuel packages, initial sources, oxidizers,
10 and circumstances. Data should be collected to identify all
11 potential fuels, ignition sources, and oxidizers within the
12 area or areas of origin. Data may also -- data may also need
13 to be collected from outside areas of origin. Examples of
14 this would be an unburned fuel sample, an exemplar ignition
15 source indicated in another area. Data on -- data on the
16 circumstances bringing the fuel and ignition source and
17 oxidizers together may come from many different sources. If
18 available, a review of the prefire documentation of possible
19 areas of origin can be valuable."

20 Q All right. Now, in looking at the data-- Well, let
21 me ask you first, did you determine the area of origin of this
22 fire?

23 A Yes.

24 Q All right. And what did you determine the area of
25 origin to be?

1 A Been in the area of the master bedroom.

2 Q Let me show you what has been marked as Exhibit 105.
3 And I think that you have -- I think you can point on your
4 monitor there and a little dot will come up.

5 A Okay.

6 Q Can you circle the area of origin for us, or point
7 to it at least?

8 A (Witness complying.)

9 Q All right. Now, what-- Now, how did you determine
10 that this area was the area of origin?

11 A Fire patterns and material loss. Also, a witness
12 statement early on at the fire seen it in this area.

13 Q Okay. Do you -- did you consider the statements of
14 the firemen about what they observed when they first got to
15 the fire scene?

16 A Absolutely. Yes.

17 Q All right. Did you collect data from that area of
18 origin?

19 A I did.

20 Q All right. Did you collect data, as indicated in
21 Section 18.3, from outside the area of origin?

22 A I did, yes.

23 Q Why did you do that?

24 A Outside area of origin, I was -- I noticed some fire
25 patterns that looked to me unusual, so samples of the fire

1 debris were taken from that area.

2 Q And did you also collect other types of data from
3 outside the area of origin?

4 A I did.

5 Q And I just want to confirm, the types of data that
6 you just went through in determining the area of origin, are
7 those consistent with NFPA 921?

8 A Yes, sir.

9 Q And just let me refer you to Section 17.1.2. And I
10 won't ask you to read this, but let's look at it just a
11 second, if I can get it on the monitor. Does this describe
12 things that you need to consider in order to determine the
13 origin of the fire?

14 A Yes, it does.

15 Q All right. And did you consider witness
16 information?

17 A I did.

18 Q And that was primarily from the firemen?

19 A Firemen and a neighbor.

20 Q All right. And did you consider fire patterns?

21 A Yes.

22 Q Was there any arc mapping done?

23 A It was attempted to a point. There was a lot of
24 heavy damage to the electrical system.

25 Q All right. And just for the jury's benefit, what is

1 arc mapping?

2 A Arc mapping shows where the fire may have first
3 attacked the electrical system that would have still been
4 energized. So that leaves you with beading, per se, on the
5 wiring. So that will guide you to an area of origin.

6 Q And then did you consider fire dynamics?

7 A Yes.

8 Q All right. And give us some idea of what fire
9 dynamics are, generally speaking.

10 A Fire dynamics can show you the fire travel, where
11 the fire may have vented first, either through the roof or
12 through a window, something of that nature.

13 Q Does fire normally burn up, or down?

14 A Up.

15 Q Is that a fire dynamic?

16 A Yes. It burns up and out.

17 Q All right. Can you tell me when you first visited
18 the fire scene?

19 A Yes, sir. The first day I believe to be -- I
20 believe it was November 30th, I believe.

21 Q If the fire-- The fire was on Monday the 28th. Do
22 you remember what day you first got to the fire scene?

23 A Yes, sir, it was-- I was there on a Wednesday. So
24 I guess it would have been the 30th.

25 Q Okay. Did you get to go inside the house that day?

1 A I did enter the house just to take some photos.
2 Nothing was disturbed. I really didn't begin any type of
3 investigation at that point.

4 Q When you got to the fire scene, was the area secured
5 by anything?

6 A It was secured by fire scene tape.

7 Q Now -- and we're going to look again at the diagram,
8 but I want to walk now through your collection of data. You
9 said, I think, earlier that you start with the area of the
10 least damage --

11 A Yes, sir.

12 Q -- after you do an exterior walk-around?

13 A Yes, sir.

14 Q And did you do an exterior walk-around in this case?

15 A I did.

16 Q All right. Let me show you what is Exhibit 106.
17 And is this a photograph of the condition of the house that
18 you observed when you arrived at the fire scene?

19 A Yes, it is.

20 Q And is this the tape that you were talking about?
21 (Indicating.)

22 A Yes, sir.

23 Q And do you know what part of the house this exhibit
24 depicts?

25 A Yes, sir. That would have been the front of the

1 house, more over to the left side.

2 Q As we look back at the diagram, just to get
3 oriented, was there a part of the house that was more burned
4 and a part that was less burned?

5 A Yes, sir. The fire department did a excellent job
6 stopping the fire from spread, and it was -- it was stopped
7 right at the -- around the area of where the addition met the
8 older part of the house.

9 Q All right. And what rooms would that have been
10 near?

11 A That would have been-- The fire was mostly
12 stopped—I'm going to just draw a line, similar—right in that
13 area right there. (Indicating.)

14 Q All right. And what rooms are to the left of the
15 line that you just drew me?

16 A We would have -- the office would be on the left,
17 Bedroom 2 is on the right, and then we enter into the
18 addition, the laundry room, master bedroom, master dressing
19 room.

20 Q I need to understand something. When you first went
21 into the fire scene and prepared some of your initial
22 documents in this case, did you understand that the use of
23 this room was an office? (Indicating.)

24 A No, sir. Early on like that, I had no idea what any
25 of those rooms to the left actually were used as.

1 Q All right. So when you started your description of
2 some of the items, what did you call this room?

3 A I assumed -- assumed that to be a bedroom at the
4 time.

5 Q At some point did you learn that it was used as an
6 office?

7 A Yes, later.

8 Q All right. And when did you first learn that that
9 area was used as an office?

10 A I don't have an exact date, but --

11 Q Well, what happened to tell you that?

12 A The SAU investigator heading back with some virtual
13 tour pictures. And we determined that to be the office area,
14 through those pictures.

15 Q All right. Now, I showed you one picture of the
16 exterior. Let me show you another picture of the exterior.
17 Can you tell me what part of the building that is?
18 (Indicating.)

19 A Yes, sir. That would have been -- to the right
20 there's some of the older part of the house in it, but mostly
21 from the rock wall over to the left it was mainly the new
22 addition to the home.

23 Q Can we see in this photograph, which is Exhibit 128,
24 any part of this area labeled WIC?

25 A Can I see the picture again?

1 Q Yes. Sure. (Indicating.)

2 A Yes, sir.

3 Q Can you try to point to that, too?

4 A (Witness complying.)

5 Q At the time, then, that you first arrived at the
6 fire scene, were the walls of that room still standing?

7 A The interior, or exterior?

8 Q Exterior.

9 A They're just like displayed here, yes, exterior.

10 Q All right. And when you first arrived at the fire
11 scene, was there actually part of that floor that was still
12 standing and available for you to walk on?

13 A Yes, on the main level.

14 Q That's a good point. Let me ask you something here
15 back to the diagram. If you were going to go from, we'll say,
16 the office here into the master bedroom, how would you get
17 there? (Indicating.)

18 A There was a walkway that would have come from the
19 hallway here, straight through and into the master foyer, and
20 you could have entered the master bedroom. (Indicating.)

21 Q All right. So there were door openings in there?

22 A Yes.

23 Q Let me show you what has been marked as Collective
24 Exhibit 129 and ask you what that picture depicts.

25 A That's showing the -- of course the basement area.

1 The upper level was the master bedroom/dressing room.

2 Q All right. And to orient the jury for what we're
3 seeing on this picture, can you tell us what area of the
4 diagram this would have been?

5 A Yes. It would have been -- it would have been from
6 that view, front of the house there. (Indicating.)

7 Q Okay. So we're looking at basically the back wall
8 of that -- or the side wall of that part of the addition?

9 A Yes.

10 Q All right. And is this the area of the walk-in
11 closet, the WIC that we looked at?

12 A That's correct.

13 Q All right. Is that just another view of what was
14 standing at the time you arrived?

15 A That's correct.

16 Q All right. Then, if you would, tell us what this
17 photograph depicts. (Indicating.)

18 A That was just to the left, around the corner of the
19 last picture.

20 Q Okay. So basically if you're walking around the
21 house like this? (Indicating.)

22 A Yes, sir.

23 THE COURT: What photo -- what number was that one?

24 MR. CHASTAIN: That was part of Collective 129.

25 THE COURT: 129. Thank you.

1 BY MR. CHASTAIN:

2 Q I had asked you a question about the status of the
3 interior part of that area of the house that we've been
4 looking at over here on the -- this side, and I had asked you
5 a question about the status of the floor inside. Do you
6 recall that?

7 A Yes, sir.

8 Q Can you tell us what this picture shows?
9 (Indicating.)

10 A That picture would have been the view from the --
11 the doorway walking into the master foyer, looking to the left
12 toward the master dressing room or the walk-in closet.

13 Q All right. Can you, again, on the diagram there--
14 And this photograph is Exhibit 111. Can you show the jury the
15 view that this photograph would have?

16 A Yes. It would have been from here, looking this
17 way. (Indicating.)

18 Q Okay. Now, is the floor of that room collapsed?

19 A It's-- It's-- That whole floor, I would -- I would
20 call that a partial collapse.

21 Q All right. Is that debris that we see right here
22 sitting on a floor surface? (Indicating.)

23 A Yes.

24 Q All right. Now, was there a story above this area
25 that we're looking at?

1 A Yes, there was.

2 Q And what did you ultimately learn was in the story
3 above that?

4 A Learned it was a media room.

5 Q That photograph we just looked at was Exhibit 111.
6 Let me show you a diagram of the other -- another floor. And
7 this is part of 105. Is this a depiction of what was in the
8 level above the level that we just looked at?

9 A As the way I understand it, yes.

10 Q All right. And what rooms are identified as
11 being -- rooms are identified as being in that upper level?

12 A Appears to be son's bed, son's bath, hallway,
13 library, and a bonus room.

14 Q And is the bonus room what you were talking about a
15 media room?

16 A That's the way I understand it, yes.

17 THE COURT: What was the diagram -- number on that
18 last one?

19 MR. CHASTAIN: 105. It's part of 105, Your Honor.

20 BY MR. CHASTAIN:

21 Q Now, when you were at the fire scene initially, did
22 you make any observations about the type of debris that you
23 saw at the fire scene?

24 A I'm not sure what you're asking.

25 Q All right. Well, did you see any clothing, for

1 instance?

2 A On my initial visit?

3 Q Yes.

4 A No, sir.

5 Q Okay. Did you -- did you make my observations about
6 the amount of debris?

7 A No, sir.

8 Q All right. Now, did you go back to the fire scene
9 after that initial day?

10 A I did.

11 Q All right. When did you go back the next time?

12 A On December 5th.

13 Q All right. And who all was present on
14 December 5th when you went back to the fire scene?

15 A December 5th, when I arrived, I met with Jeremy
16 Woods. He's the Manchester fire investigator. Also Russell
17 Robinson with State Bomb and Arson. And there was some other
18 investigators with him as well.

19 Q Was an officer named Butch Stewart also present?

20 A Not initially. He showed up a little later, and
21 left a few minutes later.

22 Q All right. Now, when you got in on the 5th, did you
23 actually go into the older, less burned part of the house?

24 A We did, yes.

25 Q All right. And did you go into any of the debris on

1 the more burned side of the house?

2 A No, sir. It was photographed but not gone through.

3 Q All right. At some point in the future did you go
4 through the left side, the new addition side of the house?

5 A Yes.

6 Q All right. Why is it that you started looking over
7 on this side of the house, the less burned side?

8 A Well, there's -- there was two reasons. Most
9 importantly, 921 tells you to work from the less burned to the
10 most burned. Secondly, we had determined on that day that we
11 was going to need some assistance from some heavy equipment to
12 move some of the walls and stuff like that from the addition.

13 Q And as part of your examination on either the first
14 day that you were there or the fifth -- December 5th, did you
15 determine whether there was an exterior cause to the fire?

16 A I did, yes.

17 Q And what was that determination?

18 A There was not an exterior cause.

19 Q All right. So is that why you started investigating
20 inside?

21 A That's correct, yes.

22 Q All right. Now, at some point on December 5th, I
23 think that you said, Mr. Pierce brought some photographs?

24 A It may have been later than December 5th, but...

25 Q At some point while you were there --

1 A Yes.

2 Q -- Mr. Pierce brings them?

3 A Correct.

4 Q And we've marked as Exhibit 247-- And the jury has
5 seen these. Are these the photographs that were taken from a
6 virtual tour from a realtor?

7 A Yes, sir, I believe so.

8 Q And did you look at these?

9 A We did, yes.

10 Q And did you consider them in forming your opinions?

11 A Yes, I did.

12 Q All right. I want you to, if you would-- Let's
13 walk through your entry into and investigation of the older
14 part of the building. First of all, what door did you enter
15 in?

16 A I would have entered through the front door, here.
17 (Indicating.)

18 Q All right. And let me show you a photograph of the
19 house and see if you can recognize that. What does that--
20 And this is Photo 109. What does that photograph depict?

21 A That's the view from the front door, looking inward
22 to the back wall of the house.

23 Q All right. So is this what you saw when you first
24 walked in the house?

25 A Yes, sir.

1 Q What observations did you make, after seeing this
2 part of the house and after looking at those realtor photos,
3 as to the debris?

4 A In this part of the house?

5 Q Yes.

6 A I didn't make any one way or another in this part of
7 the house at that point.

8 Q All right. Now, after you went in and you looked
9 at -- you went in the door and looked at the room, show the
10 jury where you went next.

11 A Okay. Next, again, working from the point of least
12 amount of damage to the most, I came in and went into the
13 kitchen.

14 Q All right. Let me show you a photograph of the
15 kitchen. Does that appear to be the kitchen that you
16 inspected? (Indicating.)

17 A It is, yes, sir.

18 Q All right. And this is Exhibit Number 120. At this
19 point, based upon the comparison of the realtor photos to the
20 debris, did you make any assessments of the debris?

21 A I did, yes.

22 Q And when you're into this second room, tell us what
23 you began to see.

24 A We began noticing the contents looked a little
25 sparse. Started looking in drawers. You can imagine these --

1 the refrigerator, the stove, things that were in there were
2 top-notch quality; I mean, looked like restaurant-quality
3 kitchen. Opening some of the drawers, there was very few
4 items in the drawers. It didn't fit with -- with what we had
5 in that room.

6 Q All right. Let me show you a picture that has been
7 marked Exhibit 121. That is a really dark picture on that
8 monitor. Can you see that?

9 A I can't make much out of it.

10 MR. CHASTAIN: Your Honor, may I approach and give
11 him this one?

12 THE COURT: You may.

13 (Brief pause.)

14 BY MR. CHASTAIN:

15 Q All right. Did that help a little bit?

16 A Yes, sir.

17 Q All right. Can you tell us what this is?

18 A That would have been one of the drawers, I guess, in
19 the island or bar.

20 Q And if you could -- I know the jury will get these,
21 but if you could, turn it and show them what you're looking
22 at.

23 A This top counter part of the island, just the
24 drawer's slid out. Again, we're just looking at very few
25 utensils in this drawer—wooden spoon, a couple of tongs, and

1 a little brush.

2 Q All right. Let me show you another photo that's
3 been marked Exhibit 122. This one I think you can see on the
4 monitor. Is this also a picture that you took?

5 A Yes, sir.

6 Q What does that show?

7 A Looks like a cheese grater and -- I'm not sure what
8 the other item is.

9 Q All right. Did you ever go through and try to make
10 any specific determination of how many pieces of contents were
11 in this building?

12 A No.

13 Q Did you just have observations of the type and the
14 general amount of contents?

15 A Just the -- yes, sir, general.

16 Q Okay. That was Exhibit 122. And let me show you
17 another one I think we can see, Exhibit 123. See that one?

18 A Yes, sir.

19 Q All right. And what does that one depict?

20 A That would have been another drawer, probably in
21 line on the -- on the bar or island. Again, very few items.
22 Looks like possibly an ice cream scoop and a ink pen and -- a
23 couple of ink pens.

24 Q And I know we'll get to this a little bit later, but
25 is the type of contents that are in and not in a fire scene

1 when you investigate something that the NFPA says you should
2 look at?

3 A Yes.

4 Q All right. Let me show you another picture. This
5 is Exhibit 124. Can you tell us what that is?

6 A Again, that would have been another drawer. Looks
7 like just to the right of the one we may have just looked --
8 no, it's not. But another empty drawer.

9 Q All right. Did you look in any of the cabinets?

10 A Yes.

11 Q Let me show you--

12 Your Honor, this one has not been marked, but we
13 have shared it with opposing counsel, and they agree that it
14 can be introduced.

15 Let me show you this photograph. Do you recognize
16 this photo?

17 A I do.

18 Q And what is that depicting?

19 A This is one of the upper kitchen counters.

20 Q And why did you take that photo, or why was that
21 photo taken?

22 A I -- just to show not very many coffee cups.

23 MR. CHASTAIN: All right. Your Honor, we'll
24 introduce that as the next exhibit.

25 THE COURT: Is that 436?

1 THE CLERK: It is, 436.

2 THE COURT: Let it be received.

3 MR. CHASTAIN: Thank you.

4 (Exhibit 436 was received into evidence.)

5 BY MR. CHASTAIN:

6 Q All right. Did you go into the area which is
7 described on Exhibit 105, the diagram, called the pantry?

8 A Yes.

9 Q And did you do that basically after going into the
10 kitchen?

11 A Yes.

12 Q Did you make a comparison of the items that were in
13 the pantry at the time of the fire scene examination to the
14 items that were in the pantry in the realtor photos?

15 A Yes.

16 Q And let me show you-- Again, did you go through and
17 count everything?

18 A No.

19 Q Okay. Let me show you what's been marked as
20 Exhibit 125. And what are we seeing there?

21 A We're seeing part of the pantry, which I would call
22 the spice rack. Appears items were missing.

23 Q Let me show you a photo from Exhibit 247, the
24 realtor photos, and ask you if that is the area of the pantry,
25 also?

1 A It is, yes. Yes, it is.

2 Q Where did you go next in your inspection of the
3 house?

4 A I would have came back in from the pantry and went
5 into the sunroom, I believe it is.

6 Q All right. And then what did you do?

7 A Again, the room was photographed and documented.

8 Q All right. And what room did you go in next?

9 A I would have came back out, went into the dining
10 room.

11 Q In looking through this general area, did you see
12 any cabinets -- china cabinets or cupboards that the Banks had
13 in the house?

14 A Yes, there was two china cabinets in the back room
15 here, one on the right wall, one on the left wall.

16 Q All right. Let me show you what's been marked as
17 Collective 127. I'm not sure both of those are of a china
18 cabinet, but I'll ask you, is this photo from Exhibit 127 one
19 of the cabinets that you saw?

20 A I believe it is, yes.

21 Q All right. And this second photo, is that part of
22 that same exhibit? Was this also a cabinet or cupboard that
23 you saw?

24 A Yes.

25 Q Why did you take these pictures?

1 A Again, appears very few items were in -- in the
2 cabinets.

3 Q All right. I may have gotten us off-kilter here.
4 Have I got that back about right, Mr. Sells?

5 A No, sir. Can you slide it more?

6 Q Oh, let's see. How about that?

7 A There you go. Right there. Pretty close.

8 Q We'll fix it for you if you --

9 A Okay. Thank you.

10 Q You mentioned a sunroom. And I may have forgotten
11 to show you this. Do you recognize this photograph?

12 (Indicating.)

13 A Yes, sir, I do.

14 Q All right. What is that photograph?

15 A The photograph was taken because there's a
16 flat-panel TV mount in this corner. I don't-- It's kind of
17 hard to see right here. But in front of it was a tube-style
18 television sitting there, and it just -- it appeared strange
19 to me.

20 Q Now -- and I think I've asked you this a couple of
21 times, but in going through here, while you're noting these
22 contents issues, why are they important to you?

23 A Well, a couple of reasons. A lot of times in my
24 career I have found cases where contents are removed pre-fire
25 so they can get what they want out of the house possibly

1 before it's burnt.

2 Q Okay. And was it part of your job to go through and
3 do an inventory of things that you saw or things that you
4 didn't see?

5 A No, sir, not inventory.

6 Q All right. Where did you go next in the building?

7 A Next I would have come around and went into the
8 hallway area.

9 Q All right. And then where?

10 A I would have went down and -- we started debris
11 removal in the office.

12 Q All right. Why did you start debris removal in the
13 office?

14 A It's just the room I chose to begin in. It was
15 either going to be in the office or Bedroom 2, one of the two.
16 I just chose to start in the office.

17 Q All right. Now, had the roof over any part of this
18 part of the building collapsed?

19 A The roof --

20 Q Let me clear that for you.

21 A Okay.

22 Q And you show us-- Let me try to clear that for you.
23 All right. If you would, show us as best you can where the
24 roof had collapsed over the older part or the less burned part
25 of the building.

1 A Okay. The roof had burnt away about that area right
2 there where the fire department had stopped the fire.

3 (Indicating.) It -- it was gone from there left.

4 Q All right. So in the rooms that are identified as
5 "Office" and "Bed 2" on this diagram, was there a roof over
6 it?

7 A No.

8 Q All right. Now, I want to show you some photographs
9 from previously admitted 247. What is that a photograph of?

10 A I came to know that as the office.

11 Q All right. And I may have asked you this, but in
12 some of your earlier documents what did you call that room?

13 A Initially I called that a bedroom.

14 Q Okay. "Bedroom 1"?

15 A I believe so, yes.

16 Q Okay. And then let me show you this, also, from
17 Exhibit 247. What is that? (Indicating.)

18 A That's another view of the office.

19 Q All right. Now, when you got into the office after
20 making your path through the other less damaged parts of the
21 house, did you make any observation concerning the amount of
22 debris when compared to these photographs?

23 A There was very little debris that wasn't structural
24 debris. And what I mean by "structural" is, the actual
25 construction members—the rafters, the joists, sheetrock.

1 Other than that, there was very little.

2 Q All right. Did the floor completely get burned out
3 in this area of the building?

4 A No, sir.

5 Q Were the walls in this area of the building still
6 standing?

7 A The-- There was two standing, the -- couple
8 outside.

9 Q All right. And we'll get more into that in a
10 minute, but did you -- based on your -- those initial
11 observations, did you think that the amount of contents that
12 were shown in these photographs were in the room at the time
13 of the fire?

14 A I did not.

15 Q All right. We may have looked at this one before,
16 but let me make sure. Let me show you what's been marked as
17 Exhibit 112. What are we looking at in this photograph, if
18 you can tell?

19 A That is the office and Bedroom 2 --

20 Q All right.

21 A -- before excavation.

22 Q Before excavation.

23 A Yes.

24 Q All right. And are we looking at this area, then,
25 right here? (Indicating.)

1 A Yes, sir.

2 Q And at that point in the photograph or at this point
3 in your investigation, to your knowledge, has any item of
4 debris or any item of contents been removed from the area that
5 is shown in this photograph?

6 A Post-fire?

7 Q Post-fire, right, right.

8 A No.

9 Q Now, do you at some point go through and excavate,
10 as you've talked about later, this debris?

11 A Yes.

12 Q All right. We'll get to that. Let me show you a
13 couple of other photographs and see if you can recognize
14 those. This is what has been marked as Exhibit 283. Can you
15 tell us what that is?

16 A That is the office.

17 Q And, again, does it show the debris that was in the
18 fire before you started any contents or any debris analysis?

19 A Yes.

20 Q Let me show you another photograph and ask you if
21 you can identify this one. This is Exhibit 113.

22 A Yes, sir. That's the -- the office floor.

23 Q And is that before any layering or excavation of the
24 debris has taken place?

25 A Yes.

1 Q All right. Can you show the jury what that
2 photograph depicts?

3 A This is showing holes in the floor, here, coming
4 this way. (Indicating.) And it's also showing some saddle
5 burns. And, to me, that indicates that a large heavy or hot
6 fuel load was there burning, to cause this type of pattern.

7 Q All right. Describe for the jury in a little bit
8 more detail what a saddle burn is.

9 A Saddle burn is-- We talked earlier, a fire burn is
10 normally up and out. Saddle burn is going to be in the floor
11 joist, where the fire actually burned down. And to cause
12 that -- if this is the floor, to cause that there would have
13 to be something -- a lot of fuel load or a lot of hot fuel
14 load here in this area, to cause it to -- to burn down.

15 Q All right. Let me show you what has already been
16 marked as part of Exhibit 267, ask if you can identify that
17 for us?

18 A That's the same area, with some of the debris having
19 been removed.

20 Q All right. And can you just point to this area you
21 have described as a saddle burn? And I'll focus in on it.

22 A There's a few here, but this one right here is the
23 most prominent one. (Indicating.)

24 Q (Indicating.) Okay. Do I have it right there?

25 A Yes, sir.

1 Q All right. Now, did you consider in this case the
2 possibility that some of the roofing material that fell down
3 caused that burn?

4 A No, it wouldn't have caused that burn.

5 Q Why not?

6 A It's too generalized. It's too small. For a
7 complete roof collapse to cause just a little hole-- That's
8 not what you would get.

9 Q All right. Did you consider the possibility that
10 any of the contents that were shown in the pre-fire realtor
11 photos were responsible for causing that area?

12 A Initially I did, but by removing the debris I didn't
13 find any signs that there were any contents there.

14 Q All right. So are there other-- What else can
15 cause-- You talked about hot fuels. What else can cause a
16 fuel that will create a saddle burn such as this?

17 A An ignitable liquid will.

18 Q And does this -- does the NFPA talk about what is
19 important to recognize about saddle burns?

20 A It does.

21 Q Is a saddle burn an irregular burn pattern?

22 A It is.

23 Q And as you looked through the area of the office,
24 how many of those irregular burn patterns did you find?

25 A At least three.

1 Q Let me show you what the NFPA has as Section
2 6.3.7.12 about saddle burns. And I'm not going to ask you to
3 read it, but does it indicate that saddle burns are
4 distinctive?

5 A Yes. They're going be more distinctive than other
6 burns.

7 Q All right. And then does it actually have a picture
8 of a saddle burn in a floor joist?

9 A It appears so, yes, a small one.

10 Q All right. And is that the type of burn that you
11 observed three times in the office?

12 A Yes.

13 Q Now, if there were large items of furniture sitting
14 on these areas where the holes are indicated, would they have
15 created such small holes?

16 A No.

17 Q All right. After you concluded that the furniture
18 could not account for the burn and the collapsing roof could
19 not account for the burn, what else did that leave you in your
20 analysis of data?

21 A Well, I took into account, as well, the construction
22 of the floor. We had real hardwood tongue-and-groove
23 flooring, which is about three-quarter-inch thick, and then
24 under that we had three-quarter-inch plywood. Looking at the
25 small holes and the saddle burns that we had burnt completely

1 through that, the floor being as dense as it would have been,
2 it would have taken a very hot, small package of fuel load to
3 cause that fire.

4 Q All right. And explain to me what you're talking
5 about on the construction of the floor.

6 A It wasn't just like in a -- in a lot of homes, like
7 mine, where we have the subfloor, some carpet padding, and
8 carpet. This was real thick, expensive hardwood flooring over
9 the top of a three-quarter-inch plywood subfloor. So we're
10 talking an inch and a half of flooring, hard flooring, before
11 we got to the floor joist.

12 Q All right. And are those types of floor surfaces
13 you just described hard to burn?

14 A Yes.

15 Q Let me show you what's been marked Exhibit 280 and
16 ask -- again, I'm not sure it's a good picture on the monitor,
17 but can you show us the hardwood --

18 A Yes.

19 Q -- and the other types of wood you're talking about?

20 A This right here was the actual—oops, it's not
21 marking—the actual flooring, the boards on top of the
22 subfloor. This is the subfloor, which was underneath the
23 flooring. (Indicating.) And then we get to -- right here we
24 get to the floor joists. (Indicating.)

25 Q All right. And then what is this actually right

1 here called? (Indicating.)

2 A That would have been the floor joist. And that is
3 the saddle burn into the floor joist. (Indicating.)

4 Q Let me show you what's been marked as Exhibit 281
5 and ask if you—oops; take that off—ask if you can identify
6 that for me, please?

7 A I believe that's the same saddle burn.

8 Q All right. Did you do anything to determine if
9 there was an ignitable liquid present on that part of the
10 floor?

11 A Yes, sir. I took three samples within the area of
12 the saddle burns, debris samples.

13 Q Let me show you what's been marked as Exhibit 115
14 and ask if you can—oh, boy, that's dark—ask if you can
15 identify that for me?

16 A That would have been one of the samples. The fire
17 debris, the way these samples are taken, it's an unlined --
18 same thing as a paint can. It's an unlined can of that
19 nature. Debris is taken, placed into the can, and from there
20 it's sent to a laboratory to be tested for any type of
21 ignitable liquids.

22 Q Okay. And did you take each of the three samples
23 that were taken from this room?

24 A I did.

25 Q And let me go back and look at that one picture just

1 a minute from Exhibit 267. Can you generally note on this for
2 the jury where your three samples were taken from?

3 A Yes. There was a sample here in this area, there's
4 another sample that we can see in this picture, and then
5 another one in this area. (Indicating.)

6 Q Okay. And I think we'll look at the other one in
7 just a minute. It's a little bit further away.

8 A Yes, sir.

9 Q Okay. Now, do you run the debris analysis on these
10 samples yourself?

11 A No.

12 Q Okay. And who run -- "Who run them?" Who ran them?

13 A The chemist at the EFI lab.

14 Q And is she in Texas?

15 A Yes.

16 Q And is that Christine Foran?

17 A That's correct.

18 Q All right. Is it normal in fire investigations for
19 experts in your field to rely upon the results of those
20 chemical analyses performed by chemists such as Christine
21 Foran?

22 A Absolutely. Yes.

23 Q And is that one factor that you took into
24 consideration in reaching your opinion as to the cause of this
25 fire?

1 A Yes.

2 Q Now, specifically in regard to-- Well, I'll tell
3 you what, before I forget, let me show you a broader-out view
4 of the picture of the office. And this is one we've looked at
5 before, I think, from Exhibit 267.

6 THE COURT: What is that number? Is that 267?

7 MR. CHASTAIN: It's part of 267, Your Honor.

8 THE COURT: Thank you.

9 BY MR. CHASTAIN:

10 Q Does this show the area that you took the other
11 sample from we couldn't see on the other picture?

12 A It does.

13 Q All right. Can you show us where that was?

14 A I will. (Indicating.)

15 Q Okay. Now, in those areas-- I'll tell you what.
16 Do this for me. On the diagram, if you would—I'm going to
17 focus in on the office, okay?—generally show the jury where
18 all of those samples were taken.

19 A It would have been one in this area, one here, and
20 then right there. (Indicating.)

21 Q All right. Were -- or was the roof collapsed over
22 each of the areas where these samples were taken?

23 A Yes.

24 Q Do you know what the roofing material was made of?

25 A Yes.

1 Q What was it?

2 A It was composite shingles, which is asphalt.

3 Q Based upon-- Did you receive a report back from
4 Christine Foran after she performed her chemical analysis?

5 A I did.

6 Q And, again, is that report something that's relied
7 upon by experts in your field when conducting fire
8 investigations?

9 A It is.

10 Q Let me show you-- This was the report that you
11 received? (Indicating.)

12 A Yes, sir.

13 Q All right. Now, let's look at this. Sample 1 says
14 it was taken from Bedroom Number 1. Is that the office?

15 A Yes, sir.

16 Q All right. Is that-- We talked about why you
17 called that "Bedroom 1"?

18 A Yeah. Initially I thought it was a bedroom. And it
19 turned out to be used as the office.

20 Q All right. Sample 2 was taken from Bedroom 1.

21 A Yes.

22 Q Is that correct?

23 A Yes.

24 Q And Sample 3, also, correct?

25 A Yes.

1 Q And you showed us where those samples were taken.
2 How many of those came back as being positive from an
3 ignitable liquid?

4 A Two of the three.

5 Q All right. And what did that tell you about the
6 fire?

7 A It indicated to me that an ignitable liquid was
8 present at the areas where I took the samples.

9 Q And was that consistent with your observations that
10 you described to the jury before, before you even got the
11 sample back?

12 A I'm not sure what you mean.

13 Q Okay. You told us that you did not think it was the
14 material in the building, correct?

15 A Correct.

16 Q And was it the roof?

17 A No.

18 Q Okay. So you had come to the conclusion that it
19 needed a hot fuel load. Is that correct?

20 A Yes.

21 Q All right. And was-- Basically that's what I'm
22 asking you.

23 A Yes.

24 Q Does that kind of confirm your visual observation?

25 A Yes, it did.

1 Q Okay. Now, one of those samples in that room came
2 back negative. Is that correct?

3 A Yes, sir.

4 Q All right. And do you know what happens sometimes
5 to ignitable liquids during fires?

6 A Yes.

7 Q Can they be burned up?

8 A They can be burned away to where a chemist's
9 equipment won't pick them up.

10 Q And while we're looking at the samples, there were
11 other samples that were taken that all came back negative,
12 correct?

13 A Yes.

14 Q Was the roof burned away in the areas where Sample 4
15 was taken?

16 A Yes.

17 Q And where the Sample 5 was taken?

18 A Yes.

19 Q Sample 6?

20 A Yes.

21 Q Sample 7?

22 A Yes.

23 Q Sample 8?

24 A Yes.

25 Q And Sample 9, did that have a roof over it?

1 A Well, it's from the deck. It didn't have a roof.

2 Q Okay. So the other samples, although the roof was
3 gone, did not come back positive, correct?

4 A Correct.

5 Q Based upon your observations of the pre-fire phos --
6 pre-fire photos of the office, did it appear that there was
7 anything in there that would be an ignitable liquid?

8 A No.

9 Q So did you consider the patterns that you found and
10 the test results to be unusual?

11 A Yes.

12 Q Now, when you identified the area -- yeah, the area
13 of origin earlier, you did not include the office?

14 A No.

15 Q All right. Is it important to look for ignitable
16 liquids in areas outside the area of origin?

17 A Absolutely.

18 Q All right. Was the office near the area of origin?

19 A Yes.

20 Q And does the NFPA indicate that you should also look
21 for ignitable liquids in that area?

22 A It does.

23 Q Let me show you what is Section 22.2.7.3.1. It
24 says, "The presence of ignitable liquids may indicate a fire
25 was incendiary, especially when the ignitable liquids are

1 found in areas in which they are not normally expected." Did
2 I read that correctly?

3 A Yes.

4 Q And based upon what you have seen of the Banks' home
5 prior to the fire, would you have expected there to be an
6 ignitable liquid in that office?

7 A No.

8 Q Now, at some point, in addition to the realtor
9 photos, did you look at the contents submissions that the
10 Banks had submitted?

11 A Yes, later on.

12 Q Right. And did you do that in the course of
13 developing your opinions in this case?

14 A It confirmed. Helped confirm.

15 Q Okay. And let me just show you one-- There's two.
16 I want to make sure-- Did you see the handwritten version?

17 A Yes.

18 Q Okay. And that was Exhibit 206. And did you see--
19 (Off-the-record discussion.)

20 BY MR. CHASTAIN:

21 Q Did you see the computer-generated version from
22 FirstCall?

23 A I did, yes.

24 Q All right. And that's Exhibit 234. Now, you said
25 that looking at these documents confirmed your opinions. What

1 part of your opinions did they confirm?

2 A That contents had been removed from the structure
3 before the fire.

4 Q All right. Did you look at the bedroom, "Bed 2"
5 here, in as much detail as you looked at the office?

6 A Yes.

7 Q Let me show you a photograph that has not yet been
8 marked but has been provided to opposing counsel, and they
9 agree that it can be admitted. What is this room?
10 (Indicating.)

11 A That is Bedroom 2 after the fire debris had been
12 removed and the room was reconstructed.

13 Q All right. What is this area right in here?
14 (Indicating.)

15 A That is the closet area.

16 Q And where, if--

17 And, Judge, I guess we need to admit that photograph
18 as the next exhibit.

19 THE COURT: All right. Just one moment. Photograph
20 is 437, is it not?

21 THE CLERK: Yes, sir, 437.

22 THE COURT: All right.

23 MR. CHASTAIN: That's Bedroom 2.

24 THE COURT: Bedroom 2. That is received.

25 (Exhibit 437 was received into evidence.)

1 MR. CHASTAIN: Thank you.

2 BY MR. CHASTAIN:

3 Q Now, can you show us the closet on the diagram? Let
4 me zoom in a little bit. Give it a second. Still a little
5 bit blurry. Is it blurry to you?

6 A A touch. I can identify the closet, though.

7 Q Show us the closet.

8 A Okay. Right here. (Indicating.)

9 Q Did you look in that closet?

10 A I did.

11 Q And what did you find?

12 A There was some remains of some lenning, lenning, and
13 some empty hangers.

14 Q Okay. Let me show you a photograph, Exhibit 282.
15 Is that the photograph of the closet?

16 A It is.

17 Q All right. And can you show the jury the hangers?

18 A There's a couple here. There's remains of one
19 there, remains of one there. (Indicating.)

20 Q So if there are clothes hanging on a hanger in a
21 closet that has a fire in it, do you expect to see some
22 remains of the hanger if it's metal?

23 A Yes.

24 Q And is that consistent with the observations you've
25 made over the past 13 to 15 years going into fire scenes?

1 A Absolutely, yes.

2 Q You've talked earlier about a hallway. And if you
3 would, mark the hallway for us again, please.

4 A Okay. The hallway would have connected the living
5 room to the office and the bedrooms, which is right here.
6 (Indicating.)

7 Q Let me show you a photograph and see if you can
8 identify that for me.

9 A Yeah. That's the hallway after the fire debris was
10 removed.

11 Q All right. And is this-- You see kind of the shiny
12 part here. (Indicating.) Can you see that?

13 A Yes, sir.

14 Q And is that unburned wood?

15 A Yes.

16 Q What is this blackened area that's around the areas
17 of the unburned wood? (Indicating.)

18 A That's where the roof and the ceiling had fallen.
19 We're right there at the line where the fire was cut off.
20 That's where the material would have laid, the roof
21 structures, and burnt.

22 Q And are those -- any of those weird saddle burns in
23 that area?

24 A No, sir. That's what you would expect to see. With
25 a floor of this construction, that's what you would expect to

1 see.

2 MR. CHASTAIN: Your Honor, that's the next exhibit,
3 not yet been marked.

4 THE COURT: All right. That is going to be a picture
5 of a hallway, 438. Let it be received.

6 (Exhibit 438 was received into evidence.)

7 MR. CHASTAIN: Your Honor, would it be possible to
8 take my break at this point?

9 THE COURT: It's going to be almost necessary as far
10 as I'm concerned. Everybody up for that? All right. We'll be
11 in recess for 15 minutes.

12 (Brief recess.)

13 THE COURT: Before we begin, let me say that I was
14 taking a few minutes because -- to talk about another case
15 because I had a hearing this afternoon set. I have arranged to
16 move that hearing. So I'm not-- We're going to be able to
17 continue. So that was the reason for a little bit of delay.

18 You may proceed.

19 MR. CHASTAIN: Thank you, Your Honor.

20 BY MR. CHASTAIN:

21 Q Mr. Sells, we were talking about, I think, the --
22 your analysis of Bedroom 2. Do you remember that?

23 A Yes, sir.

24 Q All right. And then we had moved to the hallway, I
25 think. Was that all done on the first day that you were out

1 there, December 5th?

2 A Yes, sir.

3 Q All right. Now, as you approached the new addition,
4 the more burned part of the building, right in here, did you
5 have a consideration of how you were going to do that?

6 (Indicating.)

7 A Yes, sir. I-- Excuse me. It was decided that we
8 needed to employ some heavy equipment to move some of the
9 bigger pieces of the building.

10 Q All right. And, you know, before I do that, let me
11 go back to the office and the Bedroom 2 and the hallway area.
12 You've talked about removing the debris. And let me show you
13 a photograph. If you can tell, what is this right here?

14 (Indicating.)

15 A That's my shovel.

16 Q All right. Is that how-- This is Exhibit 286. Is
17 that how you removed the debris in Bedroom 1, the office, and
18 the hallway?

19 A Yes.

20 Q All right. And did you remove the debris in other
21 areas with a shovel, also?

22 A Yes.

23 Q All right. And we're going to get to those. All
24 right. Now, let's jump back to the heavy equipment issue.
25 Why did you need to bring in heavy equipment?

1 A That was a three-story area. The upper floor had
2 collapsed in on the second floor. And some great big pieces
3 of the house had to be moved. So we moved it with the piece
4 of heavy equipment.

5 Q All right. Let me show you what will be the next
6 exhibit—it's not been premarked, but it has been provided to
7 opposing counsel—and ask if you can identify that for me,
8 please?

9 A Yes, sir. That would have been the piece of heavy
10 equipment we used.

11 Q All right. And what is it doing at this point?

12 A We had decided to make entry on the upper level at
13 this point of the structure. So to gain access we had to take
14 down the front wall there to be able to access the floor on
15 that level.

16 MR. CHASTAIN: Your Honor. We move that as the next
17 exhibit.

18 THE COURT: 439. Let it be received.

19 (Exhibit 439 was received into evidence.)

20 BY MR. CHASTAIN:

21 Q And let me show you, also, another photograph that I
22 think does show the heavy equipment in some regard. What is
23 this photograph? (Indicating.)

24 A That is where the wall, front wall, would have been
25 removed. And the bucket is sitting on the floor of the upper

1 level.

2 Q All right. And when you say-- Let me make sure I
3 am clear on what level-- Let's introduce this picture first.

4 Your Honor, move that as Exhibit 440.

5 THE COURT: 440, another picture of the equipment.
6 Let it be received.

7 (Exhibit 440 was received into evidence.)

8 BY MR. CHASTAIN:

9 Q Now, just to make sure that we understand, the
10 diagram here that is -- we've been looking at and working from
11 primarily is labeled "Main Level." Is that correct?

12 A Yes, sir.

13 Q Were all of these rooms that you've been telling us
14 about on that main level of the building?

15 A Correct. Yes.

16 Q All right. So when you walked in, you could walk
17 through that main level of the building to all of these areas?

18 A Yes.

19 Q All right. Now, I want you to describe how-- And
20 the jury's seen the loader that you have, or the equipment.
21 Tell the jury how you go about removing the debris from the
22 areas that were in the walk-in closet and that other area that
23 we looked at.

24 A The equipment operator we had was very, very good.
25 He could-- He's almost like a surgeon with a bucket. So he's

1 the one I use pretty much anytime I need some heavy equipment.
2 So he knows what I'm expecting.

3 When we layer, like I stated earlier, we're going to
4 stop -- start with the very top part and bring it off, which
5 is the roof area, and work down and layer. It was reported to
6 me that in this area there was some expensive jewelry. So we
7 ended up, with our smaller shovels, hand-sifting the area
8 where the jewelry was reported, to try to discover that.

9 Q And who reported that to you?

10 A Mrs. Banks.

11 Q All right. Now, before you began the layering of
12 this part of the building, did you have an opportunity to
13 speak with Larry Banks?

14 A Briefly, yes, sir.

15 Q All right. And did -- was he with Sue Banks at the
16 time you were speaking with him?

17 A No, sir.

18 Q All right. Did Sue Banks appear while you were
19 speaking with him?

20 A Yes.

21 Q Tell me what happened when she appeared. And, first
22 of all, where were you?

23 A We were standing about -- in the doorway, driveway,
24 about in this area here. (Indicating.)

25 Q All right. So you were out at the fire scene?

1 A Yes, sir.

2 Q All right. And you were speaking with Mr. Banks?

3 A Yes, sir.

4 Q All right. And tell me what happened when
5 Mrs. Banks appeared.

6 A Mr. Banks was describing his kitchen, items that he
7 had, and that he was a chef and owned a restaurant, that type
8 thing. Mrs. Banks arrived, and as she was walking up, he
9 stated, "This is my wife." She immediately informed me that
10 she had power of attorney over Mr. Banks, and that any further
11 questions needed to come through her.

12 Q And did you then pose questions through her?

13 A Yes.

14 Q Okay. Did Mr. Banks tell you anything about any
15 cookbooks that he had?

16 A Yes.

17 Q And where did you understand those were?

18 A They were in the media room, the library area.

19 Q And was that on the floor above the area that we're
20 looking at right here?

21 A Yes. That would have been the floor above the main,
22 on the addition.

23 Q All right. Now, as this heavy equipment operator
24 would remove a layer of debris, would you look through it for
25 the fine stuff, the smaller --

1 A Oh, I would actually look through it twice. As he
2 set the bucket on the wall, I would take my shovel, dig
3 through the debris. And the debris was put into the bucket of
4 the heavy equipment a shovelful at a time. So I'd look
5 through it. After that, the bucket was removed down to ground
6 level, he would spread out the debris very finely so we could
7 see if there was anything that we might have missed on the
8 first go-through.

9 Q And did you find some small items in there?

10 A Yes.

11 Q Okay. We're going to look at those in just a
12 second. In that area identified as the WIC, did you
13 understand whether there should have been any furniture in
14 there?

15 A Yes.

16 Q Okay. And what did you understand would be in
17 there?

18 A Dressers, some chairs, sitting chairs, things of
19 that nature.

20 Q Were you able to find the dresser?

21 A Yes.

22 Q Let me show you what has been premarked as Exhibit
23 284. Is that part of a dresser?

24 A Yes, sir.

25 Q All right. Can you show the jury where that is?

1 A Yes. We're looking at the base of the dresser right
2 here, in the fire debris. (Indicating.)

3 Q And --

4 A This --

5 Q I'm sorry.

6 A This is the dresser. (Indicating.)

7 Q Okay. What is this? (Indicating.)

8 A That was an area on the floor that had been
9 protected. There was-- It was like -- it was like a
10 comforter, something like that, that had been laying there.
11 And what that done is, it actually protected the carpet from
12 the fire.

13 Q All right. Is this flooring? (Indicating.)

14 A It's carpet.

15 Q Okay. Could you walk on this part?

16 A Yes.

17 Q Okay. You mentioned jewelry. Did you look for the
18 jewelry that Mrs. Banks claimed would be in the -- in that
19 area?

20 A Yes, sir, very carefully.

21 Q Let me show you a photograph and see if you
22 recognize this.

23 A I do.

24 Q What is that photograph?

25 A That is the jewelry that we did recover from the

1 area.

2 MR. CHASTAIN: All right. That is part of Exhibit
3 267, Your Honor.

4 THE COURT: Okay. 267?

5 MR. CHASTAIN: 267, yes, sir.

6 BY MR. CHASTAIN:

7 Q And did you also take another photograph of that
8 jewelry?

9 A Yes, sir. It's in a small box to the right.

10 Q And what is this right here? (Indicating.)

11 A That's the remains of an assault rifle.

12 Q Okay. Did you find any unused ammunition in the
13 fire scene?

14 A No.

15 Q Based upon your personal experience and your
16 education and training, do you know what happens to ammunition
17 when it goes through a fire?

18 A Yes, sir.

19 Q What happens?

20 A It usually reaches an ignition point, and it'll --
21 it'll pop. You'll still find pieces of the brassing, you'll
22 find pieces of lead still in the same area, because it doesn't
23 really go very far.

24 Q Did you find any remains of the piecings or the
25 lead, whatever you just described?

1 A No.

2 Q Now, looking back at the photograph -- the close-up
3 photograph of the jewelry and other items, are there very
4 small items of property in there?

5 A Yes.

6 Q And did you find those through the sifting
7 process?

8 A Yes.

9 Q Through this shoveling process that you told me
10 about?

11 A Yes.

12 Q So if there were other items of property similarly
13 sized, would you have expected to find those?

14 A Yes, sir.

15 Q All right. When you got into this area of the
16 property, did you find any clothing? (Indicating.)

17 A Yes, sir.

18 Q All right. And where did you find the clothing?

19 A To the right of the dresser that we just found,
20 which would have been somewhere in this area here.
21 (Indicating.)

22 Q All right. Let me show you a picture and ask if you
23 can identify this photograph. It is Exhibit 286.

24 A That's a picture of the clothing being removed from
25 the fire debris.

1 Q All right. Has the room already been cleared at
2 this point?

3 A Cleared?

4 Q Of all the debris.

5 A No.

6 Q Okay. Are you in the process of doing that?

7 A Yes, sir.

8 Q And is this the shovel, again, that you used?
9 (Indicating.)

10 A Yes, sir.

11 Q All right. Did you ultimately lay out all of the
12 clothing that you found in this area at the fire scene?

13 A I did, yes, sir.

14 Q Let me show you what's Exhibit 119. And is that the
15 clothing that you found?

16 A Correct. It is.

17 Q Now, have you seen fires where clothing has been
18 exposed to the fire?

19 A Yes.

20 Q All right. And do all parts of clothing burn during
21 a fire?

22 A No.

23 Q All right. If I have a pair of jeans, based on your
24 experience and your observations, tell me what part of those
25 jeans would not burn during a fire.

1 A The actual button. Depending on what type of jeans,
2 some of them just have all buttons, some of them have zippers.
3 The zippers will remain. The rivets that go on the side
4 pockets will remain. Some metal pieces that -- that will
5 survive the fire.

6 Q All right. What about shoes? Have you had
7 observations of shoes after a fire scene?

8 A Yes.

9 Q All right. Do all parts of shoes disappear?

10 A No.

11 Q What do they look like?

12 A Again, depending on the type of shoe, any metal
13 pieces will survive. Tennis shoes, it's very difficult to get
14 the soles of the tennis shoes to burn. It takes a lot -- a
15 lot of heat to get them to just melt away where they're
16 unrecognizable.

17 Q What about purses? Do you have any observations of
18 purses surviving fires?

19 A Yes.

20 Q What parts survive fires?

21 A Same thing. Again, depending on what the material
22 was made out of, you'll have several metal parts that
23 survive—buckles, chains, clasps, things of that nature.

24 Q What about luggage?

25 A Luggage as well, yes, same thing. Anything metal,

1 you'll be able to identify what it came from.

2 Q Let me show you another photograph of the clothing,
3 a little bit different angle, see if you can recognize this
4 one. Is that part of the clothing that you-all found at the
5 fire scene?

6 A Appears so, yes.

7 MR. CHASTAIN: Your Honor, that one's been exchanged
8 but not yet marked.

9 THE WITNESS: That actually appears that it's still
10 in the fire scene.

11 MR. CHASTAIN: Well, true, true.

12 THE WITNESS: Okay.

13 MR. CHASTAIN: And that would be Exhibit 441.

14 THE COURT: 441, clothing in fire scene. Let it be
15 received.

16 (Exhibit 441 was received into evidence.)

17 BY MR. CHASTAIN:

18 Q Now, in coming to your opinions in this case, did
19 you specifically look at the pre-fire photographs that were
20 taken of this area by the realtor?

21 A I did.

22 Q Let me show you one of those. It is Exhibit 87.
23 Can you tell us what we're seeing here in the realtor photo?

24 A That would have been the walk-in closet.

25 Q All right. I know it may be kind of hard to see,

1 but at this point can you tell what these things are?

2 (Indicating.)

3 A I cannot from here.

4 MR. CHASTAIN: Your Honor, may I approach?

5 THE COURT: You may.

6 (Brief pause.)

7 BY MR. CHASTAIN:

8 Q Is that better? (Indicating.)

9 A Yes.

10 Q Okay. If you would, hold that up to the jury. I
11 know it's hard to see from that distance, but show us what we
12 see in those photographs -- in that photograph.

13 A We've got two rows of clothing, all these pants.
14 Looks like tops. Here we've got a huge shoe rack. Several,
15 several pairs of shoes. (Indicating.)

16 Q All right. When you went into the fire scene, and
17 specifically in this area of the walk-in closet that is shown
18 on the diagram, was all of the shoe rack destroyed?

19 A No, sir.

20 Q Did you find any shoes in the shoe rack?

21 A Not in the shoe rack, no, sir.

22 Q Did you find any shoes in the debris by the shoe
23 rack?

24 A We found, I think, two pairs.

25 Q All right. Are there more than two pair in this

1 picture?

2 A And so-- Yes, sir.

3 Q Okay. Do you see-- Look at the bottom row of the
4 clothing. Can you tell what type of hangers are on the bottom
5 row?

6 A Yes, sir. Those appear to me to be the type that
7 you'd find in a store. I guess they're called trouser
8 hangers.

9 Q Is any part of them metal?

10 A Yes.

11 Q Did you find all of these hangers in the fire
12 debris?

13 A No.

14 Q Did you find items that were smaller than these
15 hangers in the fire debris?

16 A Yes.

17 Q And based on what you said earlier, if these hangers
18 with all these clothes would have been on there at the time of
19 the fire, would you have expected to find all of these
20 hangers?

21 A Yes, sir, I would have found them.

22 Q Are there other photographs that show other--

23 87.

24 Are there other photographs that show other clothing
25 hanging on hangers in that area?

1 A Pre-fire pictures?

2 Q Yes.

3 A I believe there is.

4 Q All right. Let me show you Exhibit 86. Hopefully
5 we can--

6 No, I can't do that one either, Your Honor. May I
7 approach one more time?

8 THE COURT: You may.

9 (Brief pause.)

10 BY MR. CHASTAIN:

11 Q All right. Again, now can you see the top layer of
12 clothing there?

13 A Yes.

14 Q Does it appear to also have metal hangers?

15 A From what I can tell, at least the top part is
16 metal.

17 Q Okay. And would you expect that part to survive in
18 a fire?

19 A Yes.

20 Q And did you find that number of hangers?

21 A No.

22 Q Do you have a fireplace at your home?

23 A I do.

24 Q And do you burn wood in it?

25 A I do.

1 Q All right. When wood burns, does the size of the
2 piece of wood have anything to do with how quickly and how
3 much it burns?

4 A Yes.

5 Q All right. What about on furniture; does the size
6 of wood on furniture have anything to do with how much it
7 burns?

8 A Yes.

9 Q Let me show you a photograph and see if you
10 recognize it, please. This is from the pre-fire realtor
11 photos, also. This is Number 96. I think you can see this
12 one. Do you see that photograph?

13 A Yes, I do.

14 Q All right. Do you see these bedposts?

15 A Yes.

16 Q And if those were made of wood, would you have
17 expected any part of those bedposts to have survived this
18 fire?

19 A Yes, sir.

20 Q Why?

21 A The density of the material, again, and, again,
22 depending on what type of wood it is, would determine how --
23 the rate of fire that it would have burnt. I would have
24 expected to find some remains of that.

25 Q And what room is this, to your understanding?

1 A I believe it's the master bedroom.

2 Q And did you sift that area or shovel and trowel that
3 area?

4 A Yes.

5 Q Did you find any chunks of wood that could have been
6 that bedpost?

7 A No.

8 Q What is this? (Indicating.)

9 A I can't tell.

10 Q You need to put your glasses on. What is this?
11 (Indicating.)

12 A It looks like a file folder.

13 MR. CHASTAIN: Your Honor, may I approach for --

14 THE WITNESS: Sorry.

15 THE COURT: You may. You may. He's got to-- He
16 needs it a little bit closer.

17 BY MR. CHASTAIN:

18 Q Don't read the words. Just look at what it is.

19 A Okay.

20 Q Okay. What do you call that?

21 A An evidence file.

22 Q Okay. But is this a notebook, is what I'm asking
23 you.

24 A Oh, yes. Okay. I'm sorry.

25 Q I may have gotten too technical. I'm sorry.

1 A Now I know what you meant. I'm sorry.

2 Q And is this a three-ring notebook?

3 A Three-ring binder, yes, sir.

4 Q What are these parts in the middle made of?

5 (Indicating.)

6 A They're made of metal.

7 Q All right. And what, typically, is the spine that
8 connects the little rings made of?

9 A Metal.

10 Q And based upon your observations from fire scenes
11 and your experience and training, would that type of metal
12 three-ring binder device survive the fire?

13 A Yes.

14 Q Did you know whether there were supposed to be any
15 metal three-ring binders in that fire?

16 A It was reported to me there should have been near a
17 hundred.

18 Q All right. Did you sift and look for those?

19 A Yes, sir.

20 Q What was supposed to be in those?

21 A Cookbooks, I believe.

22 Q And who told you that?

23 A I believe early -- early on Larry Banks did, and
24 also it was reported to me by Stephen Pierce that they were
25 there.

1 Q All right. Did you find any of the metal three-ring
2 binders?

3 A I did not.

4 Q How many days did you spend excavating the more
5 burned part of what we're calling the new addition?

6 A I want to say a week.

7 Q Okay. And by the time that you got done, were you
8 down to the basement floor?

9 A Yes, sir.

10 Q When you moved the debris out-- Well, let me show
11 you something else before we move off of the library. I
12 apologize. Let me show you what's been marked as Exhibit 80.
13 This is another one of those realtor photos. Did you-- Do
14 you recognize that photo as one that you reviewed?

15 A Yes.

16 Q And do you see three-ring binders in that
17 photograph?

18 A Looks like at the bottom left.

19 Q Okay. And just another view. This is Exhibit
20 Number 81. Do you recognize that photograph?

21 A Yes, sir.

22 Q And do you also see exhibit folders in that -- or
23 not exhibit folders. Do you see three-ring binders in there?

24 A Yes, sir.

25 Q All right. Once you saw these realtor photos, and

1 as you were digging through the debris, did you specifically
2 look for the three-ring binders?

3 A Yes.

4 Q At any point in your going through the house, did
5 you ever see a toaster oven?

6 A No.

7 Q Once you dug the debris out, what did you do with
8 it? After you'd hand-sifted it, you pulled it off with the
9 heavy machinery, what did you do with it?

10 A It was removed from the scene with -- shoveled into
11 the scene -- or into the bucket, sorry, spread out on the
12 ground, looked through again, and placed in a pile, a debris
13 pile.

14 Q All right. Let me show you a photograph of a pile
15 and see if you recognize this pile. I know Mrs. Banks is in
16 front of that one, but do you recognize that pile?

17 A Yes, sir.

18 Q Who made that pile?

19 A I did.

20 MR. CHASTAIN: Your Honor, move that as Exhibit 442.

21 THE COURT: Have we described that?

22 MR. CHASTAIN: Debris pile photo.

23 THE COURT: Debris pile. 442. Let it be received.

24 (Exhibit 442 was received into evidence.)

25 (Brief pause.)

1 BY MR. CHASTAIN:

2 Q So if something was in that debris pile, who put it
3 there?

4 A I would have.

5 Q Okay. And if -- when you left the scene, if it was
6 not in the debris pile, do you know where it would have come
7 from?

8 A I have no idea.

9 Q All right. Did you participate in the videotaping
10 of the property during your investigation? Did you walk the
11 videographer through --

12 A I walked him through and described what room he was
13 looking at.

14 Q All right. And we're going to look at that video in
15 just a few minutes --

16 A Okay.

17 Q -- but I just wanted to ask you that to get it set
18 up. Now, as part of your collection of data, did you look at
19 electrical appliances in this area over here, the new addition
20 area? (Indicating.)

21 A Yes.

22 Q All right. And did you bring somebody in to help
23 you with that?

24 A I did. I brought an electrical engineer in.

25 Q And is it customary in your field for a cause and

1 origin investigator to rely upon other of those type of
2 experts who contribute information to forming your opinion?

3 A Yes, it is.

4 Q And who was this electrical engineer?

5 A Matt Forbes.

6 Q Now, how long did you spend at the property, again?

7 A Close to a month, total.

8 Q How many hours or days --

9 A Like, 80 hours.

10 Q Okay. How long did Matt Forbes spend at the
11 property?

12 A Probably less than a day.

13 Q Okay. Do you recall whether you-all examined the
14 washer and dryer?

15 A He did, yes.

16 Q Did you observe burn patterns on any of the
17 appliances that were in the basement area of this new
18 addition?

19 A Burn patterns. (Moving head from side to side.)
20 Melting patterns.

21 Q I'm sorry?

22 A No burn patterns.

23 Q Okay. Were they burned from the bottom up, or top
24 down, or how did they --

25 A Top down.

1 Q Did that tell you anything about the fire to them?

2 A That the fire attacked these appliances or objects
3 from the top and caused them to melt that way, yes.

4 Q All right. Was the destruction of the electrical
5 apparatus system in the new addition pretty substantial?

6 A Yes.

7 Q All right. Was Mr. Forbes able to reach any
8 conclusions that he provided to you about an electrical cause
9 to this fire?

10 A No.

11 Q He could not tell one way or the other?

12 A No.

13 Q Was he doing a cause and origin investigation?

14 A No.

15 Q Were you looking at issues beyond what he was
16 looking at?

17 A Absolutely, yes.

18 Q Now, in terms of collecting data, did you consider
19 Mr. Forbes' contributions, I guess, as data?

20 A Yes.

21 Q All right. Did you also, in developing your
22 opinions in this case, look at other fires that had occurred
23 in the Manchester area in the month of November?

24 A I did not personally, no.

25 Q As you became aware of this trial, did you do that?

1 A Yes. I had heard there was some others.

2 Q Okay. And have you given opinions concerning those
3 fires?

4 A Yes.

5 MR. McWHERTER: Objection, Your Honor. There's been
6 no reference of this testimony anywhere in his expert
7 disclosures. It's never been a part of his opinions before.

8 THE COURT: Counsel?

9 MR. McWHERTER: I'm hearing testimony I've never
10 heard.

11 THE COURT: If you can show reference, then we'll
12 discuss it, but otherwise, of course --

13 MR. CHASTAIN: All right.

14 THE COURT: -- there are rules.

15 MR. CHASTAIN: Quoting from Page 1 of his report --

16 THE COURT: Do we need a sidebar, or do we need to --

17 MR. McWHERTER: Sidebar.

18 (Brief pause.)

19 (Off-the-record discussion.)

20 THE COURT: Most problems-- Did that problem just go
21 away? If I stand in the corner, you-all notice, everything
22 works out real well.

23 BY MR. CHASTAIN:

24 Q All right. First of all, let's talk about -- is --
25 or are other fires in a similar area something you think you

1 should look at?

2 A Yes.

3 Q And is that something the NFPA says you ought to
4 look at?

5 A Yes.

6 Q Let me show you NFPA Section 22.4.8.2.2. Do you
7 have your glasses up there now?

8 A Yes.

9 Q Can you read that for us, please?

10 A Yes. It says, "A similar pattern may develop when
11 repetitive fires or a series of incendiary fires occur in the
12 same geographic area. The owners or occupants may attempt to
13 set a fire and have the cause attributed to another
14 fire-setter. In these instances the investigator may discover
15 the difference in the method, such as time of day, days of the
16 week, location of the fire, materials such as different fuels
17 used or ignition source that does not fit the established
18 fire-setting pattern."

19 Q All right. And I believe, in all fairness, that you
20 focused on two fires in the Manchester city area. Is that
21 correct?

22 A Correct. Yes.

23 Q All right. Do you remember what time of day the
24 Banks fire was reported?

25 A Yes, sir.

1 Q What time?

2 A 4:59 p.m.

3 Q All right. Now, what was one of the other fires
4 that you've commented on in this case?

5 A Earlier in the day, I believe it's the
6 veterinarian --

7 Q Okay.

8 A -- was earlier in the day.

9 Q There was one to a business, an animal clinic?

10 A Yes.

11 Q All right. Do you recall what time of the day that
12 fire actually occurred?

13 A I do not, off the top of my head.

14 Q Okay. If the reports show --

15 MR. McWHERTER: Objection. Leading.

16 THE COURT: Sustained.

17 BY MR. CHASTAIN:

18 Q All right. Was it at 4:00 p.m.?

19 A No.

20 Q Okay. Was it incendiary?

21 A Yes.

22 Q Were there any items reported missing from that
23 animal clinic?

24 A No.

25 Q What was the second fire?

1 A To a house under construction.

2 Q Okay. Do you remember if that was at 4:00 p.m. or
3 5:00 p.m.?

4 A No.

5 Q Okay. And was that even determined to be an
6 incendiary fire?

7 A No, it was not.

8 Q Okay. So in Manchester in the month of November how
9 many incendiary fires do you know of occurring?

10 A I'm aware of two.

11 Q And what's one?

12 A The animal hospital.

13 Q What's the second one?

14 A The Banks' house.

15 Q Okay. Have we talked about generally all of the
16 data that you collected and the data that you analyzed?

17 A Yes, except for the statements I got from the
18 firefighters.

19 Q Okay. Fair enough. And let's talk about those.
20 What did the statements reveal about the stage of development
21 of the fire when it was first observed by the fire department?

22 A The fire department is a half mile away from this
23 structure. The fire department ar- -- from the witness that
24 called it in, he could see the interior -- the entire interior
25 of the master bedroom area. By the time the fire department,

1 which is a full-time, paid fire department, responded a half a
2 mile, the fire had already vented through the roof and
3 traveled halfway through the structure. So it showed a rapid
4 fire growth.

5 Q Okay. What does rapid fire growth have, if
6 anything, to do with the possible presence of ignitable
7 liquids?

8 A Another term that could be used is an "accelerated"
9 fire growth, which would indicate an ignitable liquid used as
10 an accelerant in the fire.

11 Q All right. Once you got to the point of recognizing
12 the need, defining the problem, collecting data, and analyzing
13 the data, what did you do next?

14 A We had to develop a hypothesis, try to put causes
15 together as to what could have happened to cause this fire.

16 Q All right. At this time are you looking for the
17 probable answer for what did happen?

18 A Yes.

19 Q All right. And are you going to come up with
20 possibilities first?

21 A Yes.

22 Q All right. Tell me and tell the jury the possible
23 causes that you identified at this stage of your analysis.

24 A At this point we had -- we had a few different ones.
25 Weather was something that I had to clear up, was it a

1 lightning strike that possibly could have caused this fire.
2 Was it an electrical fire—a lot of electrical damage—was we
3 able to rule that out or not. Next was, was it something that
4 the homeowners may have done, was there any work done to the
5 house recently. You could tell there had been additions to
6 the house. So, in my mind, was there anything else going on,
7 did they have remodeling work done, anything of that nature.
8 And then, lastly, an incendiary or a set fire.

9 Q When you say "something the homeowner's done," do
10 you mean accidental?

11 A Yes.

12 Q All right. In developing your hypothesis, was it
13 necessary for you to attempt to locate an ignition source?

14 A Yes.

15 Q Were you able to do that in the area that you have
16 shown us in the area of origin?

17 A I was not.

18 Q All right. Was that area very badly destroyed?

19 A It was.

20 Q Did the fact that you could not identify an ignition
21 source within the area where you believe the fire started
22 compel you to rule that this fire was undetermined?

23 A No, it would not.

24 Q And is that consistent with the NFPA?

25 A It is.

1 Q Let me show you Section 19.2.1.4. And I want to
2 focus on Subsection B. Can you read that?

3 A Yes.

4 Q All right. Can you read this first sentence for us,
5 please?

6 A "In the instance in which the investigator fails to
7 identify the ignition source, the fire need not always be
8 classified as undetermined."

9 Q All right. And what does the second sentence say?

10 A "If the physical evidence established one factor,
11 such as the use of an accelerant, that evidence may be
12 sufficient to establish an incendiary fire cause
13 classification even where other factors such as the ignition
14 source cannot be identified."

15 Q All right. And in this case were you able to
16 establish the physical evidence of the use of an accelerant?

17 A Yes, I was.

18 Q Okay. But, now, that still was not in the area of
19 origin, was it?

20 A No.

21 Q Okay. And is that appropriate, under NFPA, to use
22 the presence of an accelerant in a different area of -- than
23 the area of origin --

24 A Yes, it is.

25 Q -- in coming to your opinions?

1 A Yes, it is.

2 Q Let me direct you to Section 18.4.4.3. And the jury
3 will get to see this whole thing, but I want you to begin
4 reading here at "The following."

5 A "The following are examples of situations that lend
6 themselves to forming an ignition scenario when the ignition
7 source is not found during the examination of the fire scene.
8 The list is not exclusive, and the fire investigator is
9 cautioned not to hypothesize an ignition sequence without data
10 and logistically supporting the hypothesis."

11 Q All right. And would you-- Section A, what does it
12 say?

13 A "Fuel -- fuel explosions and flashovers."

14 Q All right. "Diffuse fuel explosions and flash
15 fires," right?

16 A "Flash fires." I'm sorry.

17 Q Did you see evidence of either one of those in this
18 fire?

19 A No.

20 Q Part B says, "When an ignitable liquid residue
21 confirmed by laboratory analysis is found at one or more
22 locations within the fire scene and its present at that --
23 presence at that location does not have an innocent
24 explanation." Did I read that correctly?

25 A Yes.

1 Q All right. Did you find ignitable residue --
2 ignitable liquid residue confirmed by laboratory analysis?

3 A Yes.

4 Q Was it at one or more locations within the house?

5 A Yes.

6 Q And did its presence, based upon your observations
7 of the pre-fire condition of the house, have an innocent
8 explanation?

9 A No.

10 Q Okay. Did you therefore consider it appropriate,
11 under NFPA, to reach a conclusion that the fire was incendiary
12 even though you could not identify the exact ignition source?

13 A Yes.

14 Q And as you worked through these hypotheses—I know
15 I'm jumping ahead a little bit, but—did you consider the
16 other type of data that NFPA says you can consider once you
17 have that positive accelerant test? Did I lose you on that
18 one?

19 A (Moving head up and down.)

20 Q I could tell. Okay. As you worked through the
21 various hypotheses you went through --

22 A Okay.

23 Q -- did you consider what we just read by NFPA?

24 A Yes.

25 Q Okay. And did you consider all of the other data in

1 relation to the positive accelerant test that you got?

2 A Yes.

3 Q Now, let's talk about how you went from the multiple
4 hypotheses that you told us about down to testing. Why is it
5 important to test a hypothesis?

6 A To see if it will actually fit the scenario that
7 you're working there.

8 Q All right. Now, I mean, when I think of the
9 scientific method, I think of doing a laboratory test. Does
10 it have to be a laboratory test, under NFPA, to --

11 A No.

12 Q -- test the hypothesis?

13 A No.

14 Q What do you do to test the hypothesis?

15 A You can base it off your experience and just common
16 sense, would it -- could this happen, you know.

17 Q Okay. And what types of things did you use in this
18 case particularly to test the various hypotheses that you
19 developed?

20 A We used electrical engineering, statements from
21 firefighters and neighbors, if there were any storms in the
22 area, if there was any lightning reported, again, debris
23 testing.

24 Q Okay. Did you continue to test the hypotheses until
25 one appeared that was probable?

1 A Yes.

2 Q All right. And is that consistent with the NFPA?

3 A It is.

4 Q Let me show you Section 4.3.6. And I want to ask
5 you some questions about this.

6 A Okay.

7 Q Second sentence here, "Testing of the hypothesis is
8 done by the principle of deductive reasoning in which the
9 investigator compares his or her hypothesis to all the known
10 facts as well as the body of scientific knowledge associated
11 with the phenomena relevant to the specific incident." Did I
12 read that correctly?

13 A Yes.

14 Q All right. What is deductive reasoning?

15 A It's basically logic; again, could this have
16 happened.

17 Q And let me ask you something, then. Taking your
18 hypotheses—let me be sure I got them all—could an electrical
19 fire account for the presence of ignitable liquid in the
20 office?

21 A No.

22 Q Could a lightning strike account for the presence of
23 ignitable liquid in the office?

24 A No.

25 Q Could faulty wiring, something that the homeowners

1 may have done accidentally, unless it was pour an accelerant
2 on the floor, account for ignitable liquids in the office?

3 A No.

4 Q Did I cover all your hy- -- other hypotheses?

5 A I think so.

6 Q Okay. Can an electrical cause of the fire account
7 for missing contents?

8 A No.

9 Q Can a lightning strike account for missing contents?

10 A No.

11 Q Can a negligent accidental cause account for missing
12 contents?

13 A No.

14 Q What was the only hypothesis that you had, after
15 subjecting it to the test of deductive reasoning, that
16 explained what happened in this case?

17 A An incendiary fire, set fire.

18 Q And I told you we would come back to this earlier,
19 but I need to clear it up now. The fact of missing contents,
20 based upon your pre-fire comparison to the post-fire
21 comparison, was that something that you considered in working
22 from the multiple hypotheses down to your final hypothesis?

23 A It was.

24 Q And your final hypothesis, again, is that your
25 opinion?

1 A Yes.

2 Q And does-- In your experience, are there indicators
3 of an incendiary fire that are not directly related to
4 combustion?

5 A Yes.

6 Q And is that consistent with the NFPA?

7 A Yes.

8 Q Let me show you Section 22.3. It says, "These
9 indications are generally conditions or circumstances that in
10 and of themselves are not directly related to the fire or
11 explosion cause but that may be used by the investigator to
12 develop ignition hypotheses, to select witnesses for
13 interviewing, to develop suspects, and to develop avenues for
14 further investigation. The indicators in this section are
15 those that tend to show that somebody had prior knowledge of
16 the fire." Did I read that correctly?

17 A Yes, you did.

18 Q And when we get down to Section 22.3.3.3, it's
19 entitled "Absence of Personal Items Prior to the Fire." Did I
20 read that correctly?

21 A Yep. Yes, sir.

22 Q And it says, "The absence of items that are
23 personal, irreplaceable, or difficult items to replace should
24 be investigated. Examples of those items include jewelry,
25 photographs, awards, certificates, trophies, art, pets,

1 sports, and hobby equipment and so forth. Also, the removal
2 of important documents (example: fire insurance policy,
3 business records, tax records) prior to the fire should be
4 investigated and explained." Did I read that correctly?

5 A Yes, sir.

6 Q And did you consider the absence of items identified
7 by Mr. and Mrs. Banks as being personal in developing your
8 opinions in this case?

9 A I did.

10 Q And is that something that could not be explained by
11 any other hypothesis save the incendiary fire?

12 A Yes, it is.

13 Q All right. We're going to watch the video in just a
14 minute --

15 A Okay.

16 Q -- if the Court wants to at this time, but I want to
17 ask you, you have now -- we've gone through your multiple
18 hypotheses for what could have happened.

19 A Yes.

20 Q You've tested the hypotheses.

21 A Correct.

22 Q And you've reached your opinion.

23 A Yes.

24 Q Is your opinion more probable than not?

25 A It's probable, yes.

1 Q In fact, when Mr. McWherter deposed you, did you put
2 a percentage on it?

3 A I did.

4 Q How sure are you that this was an incendiary fire?

5 A Ninety-five percent.

6 Q Now, I know we're going to watch the video. And I'm
7 going to let you walk us through and show us your opinions.
8 But using the diagram and taking all of your information
9 together, can you tell the-- Did I get that right?

10 (Brief pause.)

11 BY MR. CHASTAIN:

12 Q Can you tell the ladies and gentlemen of the jury
13 your opinion as to how this fire was started and how it
14 spread?

15 A Yes. Be glad to. I believe that the ignitable
16 liquid was poured in the office, out the back door, as such,
17 and again in the master bedroom area, out the back door, and
18 ignited.

19 Q All right. And you believe that even though the
20 samples that you got from this area that I've circled -- and
21 is that basically the area you said was the area of origin?
22 (Indicating.)

23 A That's correct.

24 Q You believe that even though those samples came back
25 negative?

1 A I do.

2 Q All right. Are there arson fires where all the
3 samples come back negative?

4 A Yes.

5 Q And in this case did all the samples come back
6 negative?

7 A No.

8 MR. CHASTAIN: Your Honor, at this point I have a
9 video that is about 35 minutes, total. I don't know what your
10 pleasure is for whether we do that now or last -- first thing
11 when we come back.

12 THE COURT: Can you-all make it 35 minutes, folks?
13 Video? Jury all right with that?

14 (Brief pause.)

15 THE COURT: We'll have a 35-minute video.

16 MR. CHASTAIN: It may be a little shorter, but that's
17 worst-case scenario.

18 THE COURT: Turn it up just a little. Move it a
19 little faster.

20 MR. CHASTAIN: Okay. There are no-- There is no
21 audio to this.

22 BY MR. CHASTAIN:

23 Q Mr. Sells, before we start playing it, do you
24 remember going with the videographer who actually took the
25 video?

1 A Yes.

2 Q And did you walk him through, doing certain things
3 as you walked through the house?

4 A Yes. He asked me to walk him through the house and
5 identify what each room was, what it was used for.

6 Q All right. Well, now, what I want you to do -- as
7 we watch this video, if you need us to stop so you can make a
8 point, please tell us, and we will stop.

9 A Okay.

10 Q What I want you to do-- Don't tell us what anybody
11 else said. I want to see what you're seeing through your eyes
12 as you go through this fire scene. And that's what I want you
13 to tell the jury.

14 A Okay.

15 MR. CHASTAIN: All right. Before this starts, Your
16 Honor, this is Exhibit 268.

17 THE COURT: Thank you.

18 (The video was played in open court, and the
19 proceedings continued as follows:)

20 BY MR. CHASTAIN:

21 Q Mr. Sells, what are we seeing here? Walk --

22 A We're looking at the front of the house, more to the
23 left. We're moving toward the addition. This would be the
24 far right of the house. This is where -- the pantry area,
25 living room area. Again, living room and dining room area.

1 Moving to the -- Bedroom 3.

2 Q Did the ceiling and roof collapse over the pantry?

3 A No.

4 Q Okay.

5 A This is the addition area. This is the basement.

6 There is a debris pile. This, again, is the addition area

7 after all the fire debris and construction material was

8 brought out. This is showing the interior of the--

9 Can you stop there, please?

10 This is showing the interior of the addition. If
11 you remember, in the earlier pictures there was two levels.

12 At the end of the debris removal and sifting process, this is
13 the product that I completed.

14 Q Now, let me ask you something before we move on.

15 Well, never mind. Go ahead.

16 (The video was played in open court, and the
17 proceedings continued as follows:)

18 A This is where some other debris items were moved
19 out, examined more carefully. We're looking at the rear deck.
20 This is in the area where -- I drew on the diagram earlier
21 where I believe the trailers to be poured out of the back,
22 more so by here where the handrails are, within the rear exit
23 of the house, out the master bedroom.

24 Q Did we just see you in the photo or in the video?

25 A I missed it. I was addressing the jury.

1 Q Okay.

2 A This would have been the rear door. If you'll
3 notice, again, we've got another saddle burn. Samples were
4 taken in the area. They came back negative. And, again, it's
5 not uncommon for that to happen. You can also see smaller
6 saddle burns down the steps. There's one. (Indicating.)

7 Q And is that indicative of an ignitable liquid being
8 poured down the steps?

9 A It is. This is the front door -- I'm sorry, the
10 rear door. I'm sorry. It's the rear door. This is the
11 sitting room. This is the side view, which if you're facing
12 the house, the right side. This is walking into the front
13 door. You're going to be looking into the dining room area,
14 straight back. There's two china cabinets. Living room's to
15 the left. Kitchen's to the right, and a small bathroom as
16 well, half bath.

17 What we're looking at here is ceiling collapse, not
18 roof collapse. Most of it-- We got some here, due to the
19 joists falling. (Indicating.) But all of this fire in this
20 area was above the ceiling. (Indicating.) We've still got
21 paint on the walls. It's not damaged by fire.

22 Q So the roof -- the shingle part of the roof was
23 still there? This was the drywall that we look up and see
24 like --

25 A Drywall and the floor joists, yes.

1 Q Okay.

2 A We're looking through the drawers of a hutch, I
3 believe is what you would call it. And some of them, the
4 water had caused the drawers to swell, so they wouldn't open.

5 This is the bar area. Again, nice, commercial-grade
6 refrigerators and stoves. This is showing underneath the
7 cabinets there's a few cooking utensils there. The drawer is
8 swollen shut. Some more drawers. Very few items. Again,
9 another drawer, very few items. Cabinet near the stove, just
10 a couple of items in it. Sliding spice rack seemed to be
11 devoided of items.

12 Again, another utensil drawer, one showing a few
13 pots and pans. Totally empty drawer. This is the cabinet
14 where the -- I would think the eatery, dishes, bowls, things
15 of that nature would have been there. You can see there's
16 only one or two.

17 This is the dishwasher. Another cabinet underneath
18 the bar area. Another glass cabinet. Space on the countertop
19 there kind of -- looked to me like something should have been
20 there but it wasn't.

21 Moving into the pantry. Microwave. Looks like some
22 of the spices are out of order or not there.

23 Next we're moving into a little storage room where
24 the electrical panel -- there were some tools, things of that
25 nature. This-- I'm sorry, I jumped ahead of myself. Another

1 part of the pantry. Now we're in the storage room. There's
2 electrical panels. Back in the kitchen. Cabinet in the
3 kitchen that was empty, showing where items were there but are
4 not there now, they created an indentation.

5 Q Were they there at the time of the fire?

6 A No, they were not.

7 Q How do you know that?

8 A They're not protected. I can show later in the
9 video where -- a protected area, if something's there during
10 the fire and then it's removed, what it will look like.

11 This is out the -- out the back of the house onto
12 the deck. The deck went all the way around the house, around
13 the back.

14 This is another cabinet that was in the kitchen.
15 Parts of it are empty. Some parts of it have candles, things
16 of that nature in it. Again, this is another cabinet that's
17 in the kitchen.

18 We're moving into the sitting room. Furniture did
19 seem to be pretty well in place in here. This is the--

20 Can you stop?

21 This is-- Let me-- That's okay.

22 (Brief pause.)

23 (The video was played in open court, and the
24 proceedings continued as follows:)

25 (Off-the-record discussion.)

1 MR. McWHERTER: Your Honor, I suppose the objection
2 of cumulative might be appropriate here, I'm thinking.

3 THE COURT: I'm a bit lost. Is this-- Have we gone
4 way back?

5 MR. CHASTAIN: We went back one segment.

6 MR. McWHERTER: He is replaying the same video, which
7 is fine. I understand they made a mistake. I just want it to
8 be clear for the record that it's the same thing again.

9 THE COURT: Yeah, it's the same thing again. That's
10 making it longer, too.

11 MR. CHASTAIN: Only got about 3 minutes 26 seconds
12 there.

13 (The video was played in open court, and the
14 proceedings continued as follows:)

15 THE COURT: This is the part we've seen before.

16 MR. CHASTAIN: We have. It's coming.

17 THE COURT: Okay. That's what I thought.

18 MR. CHASTAIN: Our stop didn't stop fast enough.

19 THE WITNESS: We're almost there.

20 (Brief pause.)

21 (The video was played in open court, and the
22 proceedings continued as follows:)

23 BY MR. CHASTAIN:

24 Q Okay. Now we're going in that sitting room again,
25 right?

1 A Okay. When we go to the TV, can we stop? Right
2 there. This is what I was mentioning earlier. It's a
3 tube-style TV. If you look behind it, the corner, you'll see
4 a big, standing flat-panel TV stand. There's no flat-panel TV
5 there.

6 Okay. Go.

7 (The video was played in open court, and the
8 proceedings continued as follows:)

9 THE WITNESS: When we look to the ground, you'll see
10 RCA cables which are loose and just laying there, which is an
11 indication it was taken loose, RCA cables laying on the ground.
12 There's the RCA cables. (Indicating.)

13 (Brief pause.)

14 BY MR. CHASTAIN:

15 Q And we see some wood flooring in that photograph.
16 Is that what the wood flooring looked like throughout the
17 house?

18 A Best I could tell. What he's trying to show here
19 is, there is nothing of the RCA cables plugged into the TV.
20 The cable box or satellite box or whatever it is is still
21 connected, but nothing's plugged up to the TV.

22 This room does look, furnishing-wise, like the
23 pre-fire pictures. Going back into the dining room. I would
24 have expected this to be the silverware drawers, or maybe
25 linens. Completely empty. And a chair. We've got a china

1 cabinet next to it, which, to me, it struck me odd not to--

2 Get ready to stop and then go back up.

3 But we're going to go through the drawers. No items
4 found inside the cabinetry under it.

5 And stop, please.

6 The china that is in there, to me, appears like it
7 was put in there in a hurry. It's upside down. If you look,
8 the Christmas trees aren't as they should be.

9 Okay. Everything underneath was empty. Empty
10 drawers. This is the dining room table. I'm going to show
11 you here in a second what a protected area would look like.

12 And right in here you can stop. Well, can we--
13 Okay. Stop.

14 Right here, right here, you can see where plates
15 were sitting during the time of the fire. (Indicating.) They
16 would have been there before the fire. What this -- happened
17 here, the firefighters came in, they wanted to get up and kind
18 of look up in the roof, they took the dishes and stacked them
19 at the end of the table. So this versus the picture that
20 we've seen before when an item was sitting and been removed
21 prior to the fire, the soot would be even over the whole --
22 these that's sitting on the bottom. This is not-- We've got
23 soot here, you've got it everywhere, but you've -- we've got
24 protected items here where you can tell where plates were
25 sitting.

1 Okay. This is China Cabinet Number 2. There is
2 some silver in this box, nothing on the bottom shelf there.
3 We was trying to get some kind of name off the silver. I
4 wouldn't know one from another, but we was trying to get that
5 documented, anyhow.

6 Another set of silverware found. This is another
7 eating table, I guess, set off to the side, in case they had
8 more guests, whatever.

9 This is a fireplace area. We did have some ceiling
10 collapse here. (Indicating.) Most of that's sheetrock that's
11 laying on the couches.

12 End table was turned over. Empty drawer. Candles.
13 It looks like we've got some photo albums sitting up here as
14 well. Please pay attention to these. Empty photo albums.

15 There was some printed art in a couple of places
16 throughout the living room here. Something that struck me in
17 my investigation of it was, there was no family for those. I
18 only found one in the whole house, and it was in the kitchen.
19 But other than that-- It especially struck me odd, knowing
20 that Mr. Banks is a photographer.

21 Again, the corner cabinet was empty.

22 Another rear door of the house, out onto the deck.
23 Room here is a little storage area. There's very few items
24 inside this. Empty shelf. Little cup. Empty shelf. Empty
25 shelf.

1 Other side of the closet, all the shelves are empty
2 as well. You can tell they were empty before the fire.
3 Again, like we talked about, the soot covering all the shelves,
4 there's no protected areas there to indicate something had
5 been moved after the fire.

6 This is the hallway leading to the bedrooms and the
7 office. After all the debris-- This is where most of my
8 focus was at. All the debris had been moved out of this area
9 in the addition.

10 This was Bedroom 2 after it was reconstructed. Part
11 of a shelf. What remains of its closet. A few hangers up
12 there, just like the other one.

13 To the bedroom. I believe there's-- Yeah.

14 When it swings back to the bed, could we stop it,
15 please?

16 Bathroom in that bedroom.

17 Right there. Okay. Kind of missed it.

18 Q Well, let's keep going.

19 A Okay. Go ahead. What I was wanting to show, there
20 was a headboard and a footboard there that were pretty small
21 in diameter. They survived the fire. Like we talked about
22 earlier, that the bed in the master bedroom, how big those
23 posts were compared to how small these were. These survived.
24 We found them. We was able to reconstruct them, put them in
25 the reconstruction when we did the room.

1 Small bookcase that was in that bedroom. Looking at
2 the office on the left. He's spinning back around. Okay.
3 This is the office on the left. Bedroom 2 on the right. Same
4 thing with it, we did find the remains of the headboard.

5 This is the office again where -- our saddle burns
6 we talked about. Again, this is where the dividing wall would
7 have been, in that area. There, again, is the heavy-- That
8 would have been the doorway out into the master foyer.

9 This is the other bedroom. We've got a burn through
10 here that we found a chair had been, but it still didn't
11 explain that hole in the floor. I didn't believe that that
12 chair caused that hole.

13 And we're looking out. This would have been the
14 walkway into the master bedroom foyer. Again, that was in
15 the-- If you'll look, those saddle burns are in a straight
16 line out that door. That means something was poured.

17 That's showing how the seal on the door is burnt
18 more over to the left, which, again, is in line with the
19 saddle burns. That's the other side of the door, the rear
20 master bedroom door, that area that had that little small
21 saddle burn that went out to the deck. And where you see in
22 the clean parts right there that had broke off, that's where
23 we took the debris, from that, for our samples to be analyzed.

24 Again, this would have been the basement. You were
25 at the main level looking down. That would have been another

1 level above that. That would have been the exterior wall,
2 showing some heavy charring in that area.

3 Again, the threshold. Those patterns are in a
4 straight line out that door.

5 (Brief pause.)

6 MR. CHASTAIN: This is the last one, Your Honor.

7 (The video was played in open court, and the
8 proceedings continued as follows:)

9 THE WITNESS: All the pictures, this is the only I'm
10 assuming to be family picture in the entire house. The rest
11 are portraits.

12 MR. CHASTAIN: Is that it?

13 Thank you, Mr. Sells.

14 Thank you, Your Honor.

15 THE COURT: All right.

16 MR. McWHERTER: I've got just a few questions, you
17 might imagine, if it's a good time for lunch.

18 THE COURT: You don't think you can get all your
19 cross in before lunch?

20 MR. McWHERTER: Probably not. Probably not.

21 THE COURT: Well, I think it's probably time. We
22 probably all need to take a break now. So it's about 12:15.
23 Let's come back at 1:30. We'll have cross-examination.

24 You're through with your direct examination of
25 Mr. Sells?

1 MR. CHASTAIN: I am, Your Honor.

2 THE COURT: Now cross. All right. That will be
3 fine.

4 You may step down, Mr. Sells. We'll be ready.

5 THE WITNESS: Thank you, sir.

6 THE COURT: We're adjourned.

7 (Luncheon recess.)

8 THE COURT: All right. Cross-examination.

9 CROSS-EXAMINATION

10 BY MR. McWHERTER:

11 Q Good afternoon, Mr. Sells.

12 A Good afternoon.

13 Q Let's start with the photo album. You saw a photo
14 album in the house?

15 A Yes.

16 Q And it was empty?

17 A Yes.

18 Q And you found that odd?

19 A Yes.

20 Q Why?

21 A Every photo album in my house is full of pictures.

22 Q Is it your theory that an arsonist took the photos
23 out of the photo album and then put the empty photo album back
24 on the table and left?

25 A It would make sense to me that if someone were going

1 to burn their house, that they would take prized items out,
2 and pictures would be included in that.

3 Q Wouldn't you just pick up the photo album and take
4 it?

5 A I mean, I can't answer for how everybody thinks.

6 Q And you didn't talk to the Banks about that, did
7 you?

8 A No.

9 Q Never asked them?

10 A No.

11 Q And you didn't ask them because Cincinnati Insurance
12 Company told you not to?

13 A I was instructed that Stephen Banks would be
14 handling the interviews.

15 Q Stephen Pierce, you mean?

16 A Yeah, Stephen Pierce. I'm sorry.

17 Q And Stephens Pierce was the one that told you,
18 "Don't talk to the Banks," right?

19 A Right. He said he would be handling the interview.

20 Q But he instructed you to not talk to the Banks?

21 A He stated he would be handling the interviews.

22 Q Listen to my question. Did Mr. Pierce instruct you
23 not to talk to the Banks?

24 A In not so many words.

25 Q What exactly did he say?

1 A Again, he said that he would be handling the
2 interviews with the Banks.

3 Q Let me show you-- Do you remember you and I talked
4 at a deposition back on -- back in January of this year?

5 A Yes, sir.

6 Q We talked a long time, didn't we?

7 A A long time, yes, sir.

8 Q All right. Let me show you a few things. On
9 Page 130, starting right there, "QUESTION: All right. Did
10 you interview the Banks --

11 "ANSWER: Again, no.

12 "QUESTION: -- to ask them about what items may have
13 been removed?

14 "ANSWER: Again, no.

15 "QUESTION: Why not?

16 "ANSWER: I was instructed not to talk to them."
17 See that.

18 A I see that.

19 Q And I asked, "By whom?" And you answered?

20 A "Steve Pierce."

21 Q And then I asked you, "And why would he tell you not
22 to talk to a witness?"

23 And you answered?

24 A "I didn't ask any questions."

25 Q And then I asked you, "He just told you not to, and

1 you followed his instructions?"

2 A Correct.

3 Q And you answered?

4 A "Correct."

5 Q You also said fire does not burn down?

6 A Not normally, no.

7 Q All right. Have you ever investigated a lightning
8 strike to a house that burned to the ground before the firemen
9 got there?

10 A Yes.

11 Q It does occasionally burn down, doesn't it?

12 A Not --

13 Q If the lightning strikes the roof and the house
14 burns to the ground, what's got to happen?

15 A The fire would be burning up, and the fall-down
16 would be falling down.

17 Q And fall-down is what?

18 A Is fire debris.

19 Q And fall-down from root rafters and things like
20 that?

21 A Oh, sure. And then it would land, and then it would
22 burn up.

23 Q You have-- When you did this report and you offered
24 your opinion to Cincinnati, you worked for a company called
25 EFI Global?

1 A That's correct.

2 Q You worked with them for three or four years?

3 A Five years.

4 Q Okay. And EFI Global works for insurance companies,
5 right?

6 A Correct.

7 Q They're cause and origin investigators for insurance
8 companies?

9 A That among other things, yes.

10 Q And you -- you no longer work for EFI Global?

11 A No.

12 Q You were let go by them?

13 A Yes.

14 Q And you started your own company?

15 A Correct.

16 Q And now you're also a fireman or a fire investigator
17 with Metro Nashville?

18 A Correct.

19 Q You've never taught any seminars?

20 A No.

21 Q You have never written any treatises on fire
22 investigation?

23 A No.

24 Q You've never written any articles on fire
25 investigation?

1 A No.

2 Q You didn't participate in the drafting of NFPA 921?

3 A No.

4 Q You're not on the committee that helped draft it?

5 A No.

6 Q Other than HAZMAT, you don't have any training in

7 chemistry at all?

8 A No.

9 Q Your job as a fire investigator is to determine the

10 cause and origin?

11 A Correct.

12 Q In order to do that, you've got to be objective?

13 A Yes.

14 Q And what does that mean?

15 A Open-minded.

16 Q And you've got to be truthful?

17 A Yes.

18 Q You've got to be diligent?

19 A Yes.

20 Q You've got be accurate?

21 A Correct.

22 Q You can't have expectation bias?

23 A Right.

24 Q What does that mean?

25 A That means where you go into it with already an

1 answer to what caused it.

2 Q And it's important to be that way because the
3 decisions that you make and the opinions that you put in
4 writing affect people's lives?

5 A Yes.

6 Q I want to give you a chance. Did you make a mistake
7 in the Banks case?

8 A No.

9 Q Have you ever made a mistake?

10 A Yes.

11 Q Have you ever said a fire was intentional and you
12 were wrong?

13 A No.

14 Q Never?

15 A Never.

16 Q Two thousand fires?

17 A Yes.

18 Q And how many fires have you found to be intentional?

19 A I don't have that percentage with me.

20 Q Twenty-five percent?

21 A It would be hard -- hard to make a guess.

22 Q More than a hundred?

23 A Yes.

24 Q More than 200?

25 A That's hard to say.

1 Q But at least a hundred?

2 A At least.

3 Q You've never been wrong?

4 A No.

5 Q Let's look at the NFPA 921 for just a minute before
6 we get into the meat of this case. The NFPA 921 is a guide
7 that fire investigators follow, correct?

8 A Yes.

9 Q And you follow it?

10 A Yes.

11 Q And you followed it in this case?

12 A Yes.

13 Q And the very -- the first premise is, you follow the
14 scientific method?

15 A Yes.

16 Q And as part of the scientific method, you have to
17 come up with hypotheses as to what may have caused the fire,
18 correct?

19 A That's correct. Yes.

20 Q All right. Let's look at a few sections, starting
21 with 18.6. Tell me if I read this right. "Each of the
22 alternate hypotheses that were developed must then be tested
23 using the scientific method. If one remaining hypothesis is
24 tested using the scientific method and is determined to be
25 probable, then the cause of the fire is identified." Right?

1 A Yes.

2 Q Did I read that correctly?

3 A Yes.

4 Q And there are four potential classifications of a
5 fire? There's undetermined?

6 A Correct.

7 Q There is intentional or incendiary?

8 A Correct.

9 Q There is accidental?

10 A Correct.

11 Q Isn't there a fourth?

12 A Yes.

13 Q Natural?

14 A Right.

15 Q Lightning, things like that?

16 A Right.

17 Q And then look at Section 18.6.4. I've got it
18 highlighted there. Tell me if I read this correctly. "When
19 testing a hypothesis, the investigator should attempt to
20 disprove, rather than to confirm, the hypothesis."

21 A That's correct.

22 Q Would you agree with me that a failure to consider
23 alternative hypotheses is a serious error?

24 A Yes.

25 Q And that's -- that's what the NFPA 921 says, right?

1 A Yes.

2 Q We'll look at it. Section 18.7, starting here,
3 "When using the scientific method, the failure to consider
4 alternate hypotheses is a serious error." Did I read that
5 correctly?

6 A Yes.

7 Q You've talked a lot about irregular patterns, right?

8 A Yes.

9 Q A lot of different things can cause irregular
10 patterns. Do you agree with that?

11 A Not a lot.

12 Q Well, let's see what the NFPA 921 says about those.
13 Look at Section 6.3.7.8. Reading that, it says, "Irregular,
14 curved, or pool-shaped patterns on floors and floor coverings
15 should not be identified as resulting from ignitable liquids
16 on the basis of visual appearance alone. In cases of full
17 room involvement, patterns similar in appearance to ignitable
18 liquid burn patterns can be produced when no ignitable liquid
19 is present." Did I read that correctly?

20 A Yes.

21 Q What is full room involvement?

22 A Be flashover.

23 Q And flashover-- Tell me if I got this right. I'm
24 no fire scientist. But if I was to light this stack of paper
25 on fire in a bedroom, in a closed compartment, small

1 compartment, and this stack of paper started to burn, the
2 plume goes up, the fire plume, correct? (Indicating.)

3 A Right.

4 Q And those gases go up, and it hits the ceiling?

5 A Correct.

6 Q And when it hits the ceiling, it goes out to the
7 side? (Indicating.)

8 A Right.

9 Q And slowly that heat and those gases start coming
10 down, correct?

11 A Correct.

12 Q And at a certain point everything in the room
13 ignites, everything combustible, bam. (Indicating.)

14 A Right.

15 Q And that's called "flashover."

16 A Right.

17 Q And when flashover happens, irregular patterns show
18 up all over the place.

19 A No.

20 Q Let's look at NFPA 6.3.7.8.2. And I quote:

21 "Irregular patterns are common in situations of post-flashover
22 conditions, long extinguishing times, or building collapse."

23 A Correct.

24 Q In this case we had flashover in the office, right?

25 A I don't think so.

1 Q You don't think so?

2 A No.

3 Q We had a long extinguishment time?

4 A I think it was about a average extinguishment time.

5 Q Well, you heard the fireman say they pulled out and
6 just let it burn.

7 A Uh-huh. They went defensive. It would have been
8 average on that structure in any conditions.

9 Q It was certainly a long extinguishment time. You
10 wouldn't disagree that. It burned all night.

11 A Yeah.

12 Q What's your opinion?

13 A Not near the office, it didn't burn all night.

14 Q What is your opinion? Long, or short,
15 extinguishment?

16 A What area are we talking about?

17 Q The office area.

18 A No, it didn't burn all night.

19 Q Can you not hear me? My question is, Was it a long
20 extinguishment time, or short, in your opinion?

21 A Average.

22 Q Average. Somewhere between long and short?

23 A Yeah. Normal.

24 Q And then it also says "building collapse." We had
25 some building collapse, right?

1 A Not in the area of office. Are we talking about the
2 office? What are we talking about?

3 Q Talking about the office, sir.

4 A Okay.

5 Q The office.

6 A Okay.

7 Q Did we have collapse?

8 A No. Of the roof? Yes.

9 Q And part of the wall was gone, the exterior wall.

10 A No.

11 Q Not at all?

12 A No.

13 Q Okay. Read the next sentence for me -- or I'll read
14 it to you. "These patterns may result from the effects of hot
15 gases, flaming and smoldering debris, melted plastics, or
16 ignitable liquids." Did I read that correctly?

17 A Yes.

18 Q "If the presence of ignitable liquids is suspected,
19 supporting evidence in the form of laboratory analysis should
20 be sought." And you did that?

21 A Yes.

22 Q "It should be noted that many plastic materials
23 release hydrocarbon fumes when they pyrolize or burn."

24 Pyrolize means what?

25 A "Change forms."

1 Q So when something burns for a while, it changes
2 forms, and it no longer looks what it looked like before?

3 A Sure.

4 Q And then the next sentence -- actually two down, "A
5 positive reading should prompt further investigation and the
6 collection of samples for more detailed chemical analysis."
7 Did you take any samples of the non-damaged portion of the
8 flooring?

9 A There wasn't any.

10 Q You showed me pictures in the hallway, showed the
11 jury pictures.

12 A No. No, I didn't.

13 Q Why not?

14 A Just didn't. I never have.

15 Q And the last one that's highlighted there, "It
16 should be noted that pyrolysis products, including
17 hydrocarbons, can be detected in laboratory analysis of fire
18 debris even in the absence of the use of accelerants." That's
19 true, correct?

20 A I don't know. I'm not a chemist. I can't speak on
21 that.

22 Q You follow this document? You don't have any reason
23 to disagree with it?

24 A It's still out of my focus. I can't -- I can't
25 speak to that.

1 Q The question was, Do you have any reason to disagree
2 with it—yes, or no?

3 A No.

4 Q And the last one: "In any situation where the
5 presence of ignitable liquids is suggested, the effects of
6 flashover, air flow, hot gases, melted plastic, and building
7 collapse should be considered." Do you agree with that?

8 A Yes.

9 Q Flashover can occur, and the average time for
10 flashover to occur is three to five minutes in a bedroom,
11 correct?

12 A It depends.

13 Q Depends on?

14 A Fuel load.

15 Q How about a 10-by-10 bedroom?

16 A Depends on the fuel load.

17 Q Let's say average furnishings. I'll tell you what,
18 let's say a desk and a chair and a secretary and a lamp and a
19 cuckoo clock in a 10-by-10 room.

20 A Okay.

21 Q How long would it take for flashover to occur?

22 A Less than five minutes.

23 Q Okay. Let's read a little bit more about flashover
24 from the NFPA 921. Looking at Section 6.3.7.11.1, the
25 highlighted portion, "In the course of a flashover transition,

1 fire spreads rapidly to all exposed combustible materials as
2 the fire progresses to full room involvement." Did I read
3 that right?

4 A Yes, sir.

5 Q Skip down a little bit. "When the fire has
6 progressed to full room involvement, the area pattern may be
7 uneven, and may extend to the floor," correct?

8 A Yes.

9 Q And that happens when there's flashover?

10 A Yes, when there's flashover.

11 Q Just one more, a little more background. Fire
12 science, fun stuff. 5.10.4, "Flashover represents a
13 transition from a condition where the fire is dominated by
14 burning of the first item ignited to a condition where the
15 fire is dominated by burning of all items in the compartment.
16 This transition is generally characterized as the transition
17 from a fire in a room to a room on fire." You've heard that
18 phrase?

19 A Yes.

20 Q And you would -- wouldn't disagree with it?

21 A I agree with that.

22 Q And then the last sentence that I've highlighted,
23 "The post-flashover condition is called 'full room
24 involvement'."

25 A Yes.

1 Q And that's what got us started down this road. I
2 asked you to describe what that was, and you told me about
3 flashover. So thank you for that. You also talked about
4 drop-down just a few minutes ago, right?

5 A Yes.

6 Q Let's look at what the NFPA 921 says about that.
7 Looking at Section 6.3.3.2.10, "Drop-down/Fall-down. Burning
8 debris can fall and burn upward, creating a new pattern from
9 this heat source. This occurrence is known as drop-down."
10 Right?

11 A Correct.

12 Q And that's what you told the jury?

13 A Yes.

14 Q It can also create low burn patterns?

15 A Yes.

16 Q That's what the NFPA 921 says?

17 A Yes.

18 Q Heard a lot about saddle burns. What does the
19 NFPA 921 say about saddle burns?

20 A I don't have it memorized, but if you put it up--
21 We just looked at it earlier.

22 Q Well, you follow the NFPA 921.

23 A Right.

24 Q What does it say about saddle burns?

25 A I don't have it memorized.

1 Q Well, did you review NFPA 921 before you wrote your
2 report and referenced saddle burns?

3 A Yeah, I looked at it.

4 Q Okay. You're here in court knowing you're talking
5 about saddle burns. What does the document say about it?

6 A I don't have it memorized, what the document says
7 about it.

8 Q What can cause saddle burns?

9 A Well, a fuel load can cause it. Any type of fuel
10 load can cause it.

11 Q Okay. What else?

12 A Ignitable liquids.

13 Q Anything else?

14 A Drop-down.

15 Q Anything else?

16 A That's all I can think of right now.

17 Q There are a variety of things that can cause saddle
18 burns other than ignitable liquids.

19 A Sure.

20 Q And that's what the NFPA 921 says.

21 A Okay.

22 Q Correct?

23 A Yes.

24 Q Look at Section 6.3.7.12. Tell me if I read this
25 right. "Saddle burns are distinctive U- or saddle-shaped

1 patterns that are sometimes found on the top edges of floor
2 joists. They are caused by fire burning downward through the
3 floor above the affected joist. Saddle burns display deep
4 charring, and the fire patterns are highly localized and
5 gently curved. They also may be created by radiant heat from
6 a burning material in close proximity to the floor, including
7 materials that may melt and burn on the floor." True
8 statement?

9 A True.

10 Q Don't disagree with it?

11 A No.

12 Q Let's talk about the house. Wood frame
13 construction?

14 A Yes.

15 Q Asphalt shingle roof?

16 A Yes.

17 Q The original section was one floor?

18 A Yes.

19 Q The addition was three?

20 A Correct.

21 Q It's approximately 6900 square feet?

22 A Correct.

23 Q It had a brick wall?

24 A I'm sorry?

25 Q It had a brick exterior?

1 A Yes.

2 Q Can you see this? (Indicating.)

3 A Yes.

4 Q Right here is the office, correct? (Indicating.)

5 A Yes.

6 Q That's Bedroom 2? (Indicating.)

7 A Correct.

8 Q And this here is the addition? (Indicating.)

9 A Right.

10 Q What is between the addition and the office other

11 than -- there's the opening right there, there's a doorway,

12 and that right there is a brick wall, correct? (Indicating.)

13 A Brick wall, yes.

14 Q And that right there is a brick wall, correct?

15 (Indicating.)

16 A Right.

17 Q All right. (Indicating.)

18 MR. CHASTAIN: Your Honor, may I come around, see

19 what he's doing?

20 THE COURT: You may. You may.

21 BY MR. McWHERTER:

22 Q Just to skip ahead, you found that the fire

23 originated in the master bedroom?

24 A Master bedroom and that foyer area.

25 Q On the other side of the brick wall?

1 A Yes.

2 Q Correct?

3 A Yes.

4 Q Did you find electrical panels in the house?

5 A Yes.

6 Q Where were they?

7 A On the other side of the house, in the other side of

8 the pantry.

9 Q Here? (Indicating.)

10 A Next room over. The last room to the right.

11 Q Utility room.

12 A Yes.

13 Q Okay. So I'm just going to put a "EP."

14 A There's actually two of them there.

15 Q "2." (Indicating.) Were there any other electrical

16 panels in the home?

17 A Not that I located.

18 Q After the fire, the house had heavy fire damage.

19 You would agree with that?

20 A Yes.

21 Q And we had -- in the three-story addition, the third

22 floor fell into the second?

23 A Yes.

24 Q Third floor was consumed?

25 A It collapsed. It wasn't all consumed.

1 Q All right. But the third floor, regardless, fell
2 into the second?

3 A Correct.

4 Q And at least -- about half of the second floor fell
5 into the basement?

6 A Yes.

7 Q The office roof was gone?

8 A Yes.

9 Q The Bedroom 2 roof was gone?

10 A Yes.

11 Q There was drop-down and falling -- falling joists in
12 other portions of the home?

13 A Yes.

14 Q For example, in Bedroom 3?

15 A Yes.

16 Q And also over here? We saw some pictures in the
17 kitchen? (Indicating.)

18 A Right.

19 Q And we also saw some down in the living room?

20 A Right.

21 Q The sheetrock was gone in the office?

22 A Yes.

23 Q The framing, the 2-by-4s, were burned to basically
24 nothing?

25 A There was -- there was some remaining.

1 Q Massive damage, how about that?

2 A Heavy damage.

3 Q Heavy damage. And you found holes in the floor --

4 A Yes.

5 Q -- in the office?

6 A Yes.

7 Q You found holes in the floor in the bedroom,
8 Bedroom 2?

9 A Yes.

10 Q You're not an expert in electricity, are you?

11 A No.

12 Q You don't claim to be?

13 A No.

14 Q All right. You told me -- or I'll ask you, you
15 couldn't rule out electrical as a cause of the fire?

16 A No.

17 Q There are a variety of ways that an electrical fire
18 can start?

19 A Correct.

20 Q Loose connections?

21 A Correct.

22 Q Nails going into a wire?

23 A Correct.

24 Q Insulation on wiring that gets old or cracks?

25 A Correct.

1 Q Outlet that might overload?

2 A Correct.

3 Q And you would agree with me that electrical
4 equipment's got to be considered as a potential ignition
5 source in most fires that are investigated?

6 A Absolutely, yes, sir.

7 Q In this case you told the jury that the damage was
8 just too great to do any arc mapping?

9 A Right.

10 Q Correct? Would it be -- would it be important to
11 know where all the electrical panels are?

12 A Yes.

13 Q Because electrical panels can cause fires?

14 A Sure.

15 Q And that's where a lot of fires start, right?

16 A Absolutely.

17 Q And did it ever occur to you, Mr. Sells, that on
18 this three-story addition that was built just a few years
19 prior that tripled the size of the house, that there might
20 have been another electrical panel put in?

21 A That's why I called an electrical engineer in. I'm
22 not an expert in electric.

23 Q That's not your call; that's somebody else, right?

24 A The electrical engineer.

25 Q Did you ever ask Mr. Banks if there was another

1 electrical panel?

2 A No, I did not.

3 Q And you weren't allowed to interview him because
4 Cincinnati told you not to?

5 A Right.

6 Q And if you don't know, you've got to ask in order to
7 get the answer. That's a simple one. Right?

8 A Right.

9 Q This laundry room right here, you remember it?
10 (Indicating.)

11 A Yes.

12 Q It was destroyed by the fire, wasn't it?

13 A Yes.

14 Q And it dropped down -- that's on the main level, and
15 it dropped down a ways, correct?

16 A Yes.

17 Q But it doesn't go to the basement, does it?

18 A No.

19 Q You can't get to it from the basement?

20 A The laundry room?

21 Q Yes.

22 A No.

23 Q Because-- Let me show you the basement. This is
24 just a sketch of the basement. So here is the front part
25 where you walk in from the bottom. (Indicating.) And this is

1 the back part of the basement, separated by -- that's a
2 concrete wall right there, right? (Indicating.)

3 A Yes, that's a block wall.

4 Q Or was until you-all tore it down.

5 A Right.

6 Q And then right here there's not a basement?
7 (Indicating.)

8 A Right.

9 Q And the laundry room area dropped in onto the ground
10 right there about 8 feet down, correct?

11 A Not 8 feet down, no. Not even a foot down.

12 Q Is it your testimony under oath that there was no
13 void underneath the laundry room?

14 A I'm not sure I follow what you're -- what you're
15 saying.

16 Q Under the laundry room floor --

17 A I know where you're talking about.

18 Q -- if -- if the ground gives way, how far would you
19 fall?

20 A Probably 12, 14 inches.

21 Q Okay. You never dug that area, did you?

22 A Didn't have to.

23 Q Why?

24 A Because you could see dirt.

25 Q Yeah. Did you go-- You dug right here, didn't you?

1 Right there. (Indicating.)

2 A Dug that whole stairwell section.

3 Q You went all the way back here? (Indicating.)

4 A Yes.

5 Q Did you know that there was a crawlspace entry from
6 the basement, a ladder you crawled across to crawl under the
7 house, it was the old entry to the crawlspace?

8 A There was what, now?

9 Q A crawlspace entry under the laundry room.

10 A Yes. We seen the crawlspace entry.

11 Q You did?

12 A Yes.

13 Q Did you get up under there?

14 A No.

15 Q Why not?

16 A Had no reason to.

17 Q Stuff was falling under there, wasn't it?

18 A Stuff fell a lot of places, yeah.

19 Q Is it your testimony under oath that you dug that
20 entire area out of the laundry room?

21 A No. I said we could see the -- the ground.

22 Q Did you sift through it?

23 A No. There wasn't any need to.

24 Q Did you take your shovel and trowel it?

25 A No.

1 Q Why not?

2 A Wasn't any need to.

3 Q Well, you said you were so super careful to sift
4 through every single item. Why not do that section?

5 A Because I could see through it.

6 Q You could just look at the top of it and see it all?

7 A No, we could see-- It wasn't-- The debris in that
8 area wasn't very deep at all. You could see what was there.

9 Q So if Mr. Banks testifies that there was an
10 electrical panel right there that was installed for this area
11 of the house, that was in that debris that you never bothered
12 to look at, he'd be a liar?

13 A I never seen it if there was one there. Put it like
14 that.

15 Q Fair enough. You agree that there were not multiple
16 areas of origin, only one?

17 A I agree there was a huge area that was connected in
18 the different rooms. Some people may opinionate that as
19 multiple areas of origin or multiple fires. My statement was
20 that it was one huge fire that connected different rooms.

21 Q Ask it again. You were not able to identify
22 multiple areas of origin; you have one.

23 A Yes.

24 Q It's your opinion that an ignitable liquid was
25 poured in the office --

1 A Yes.

2 Q -- from right on the -- where the saddle burn was,
3 the big hole?

4 A Just right inside the door.

5 Q And it was poured outside the door, into the
6 addition --

7 A Correct.

8 Q -- through here --

9 A Right.

10 Q -- and out the back door? (Indicating.)

11 A Correct.

12 Q That's your theory. Okay. You didn't find any
13 evidence of a trail?

14 A No.

15 Q You took a sample of the doorway?

16 A Yes.

17 Q Came back negative?

18 A Yes.

19 Q You took samples in the master bedroom, carpet?
20 Came back negative?

21 A Yes.

22 Q You took a sample back here? (Indicating.) Came
23 back negative?

24 A Yes.

25 Q The only two positive samples you have, that you say

1 are positive, are in the office?

2 A Correct.

3 Q So there is no evidence, there's no trails, there's
4 no -- there's nothing to put all this together, except your
5 opinion? That's your theory?

6 A That's my opinion, yes.

7 Q You are objective?

8 A Yes.

9 Q You're unbiased?

10 A Yes.

11 Q You're an investigator?

12 A Correct.

13 Q It's your job to find the truth?

14 A Correct.

15 Q It's your opinion, is it not, that the fire traveled
16 from the new addition, through the attic, into the older
17 portion of the house?

18 A I believe that's one way it did travel. It traveled
19 two ways. But that's one of the ways it traveled, yes.

20 Q When you drafted your cause and origin report, you
21 said in it that it went -- traveled from old -- from new to
22 old through the attic?

23 A Yes.

24 Q New? (Indicating.) Here? (Indicating.)

25 A Uh-huh. (Moving head up and down.)

1 Q Old? (Indicating.)

2 A Right.

3 Q Let's look at your samples. Let me show you what
4 we've marked as Exhibit 419.

5 Please, Lori.

6 That's your handwriting, right?

7 A I believe so.

8 Q All right. And you've marked where you took the
9 sample. Where it says "S1," that means "Sample 1"?

10 A Correct.

11 Q And "S3" means "Sample 3"?

12 A Correct.

13 Q And "S2" means "Sample 2"?

14 A Correct.

15 Q Sample 2 came back negative?

16 A Correct.

17 Q Let's look at Exhibit 421. All right. This is a
18 pre-loss photo of the office, right?

19 A Yes.

20 Q That saddle burn, where is it in relation to the
21 desk?

22 A It would have been right under it.

23 Q So it's your theory-- Let me ask you this: How
24 would somebody pour ignitable liquid on the floor if a desk
25 was sitting there?

1 A The desk wasn't there.

2 Q Okay. So it's -- it's your testimony under oath
3 that the desk was not there at the time of the fire?

4 A No, it wasn't.

5 Q Okay. What about that chair?

6 A We found the roller part of the chair in the office.

7 Q Okay. Chair was there? Desk was gone?

8 A Correct. And this -- this other piece of furniture
9 wasn't there, either. (Indicating.)

10 Q This secretary over here to the side? (Indicating.)

11 A Yes.

12 Q Gone? No evidence of that? And this, that lamp?
13 (Indicating.)

14 A I believe we did find the lamp, yes.

15 Q And the computer?

16 A Yes.

17 Q Found it?

18 A Yes.

19 Q Was the computer sitting on the floor?

20 A It was on the floor --

21 Q Okay.

22 A -- in the corner.

23 Q All right. And then over here to -- in the bottom
24 left, the sofa, did you find any evidence of that?

25 A No.

1 Q Wasn't there?

2 A No.

3 Q You dug it, you excavated it, and you -- and you are
4 under oath and can say with 100 percent certainty it wasn't
5 there?

6 A Absolutely.

7 Q And the desk wasn't there?

8 A Absolutely not.

9 Q Okay. Let's look at another view. Same room,
10 right? (Indicating.)

11 A Correct.

12 Q But now we're standing over here in front of the
13 opening, which I've got a little too far out in the room,
14 standing here and looking that way? (Indicating.)

15 A Right.

16 Q Okay. See a chair, right?

17 A Correct.

18 Q Found no proof of that?

19 A No.

20 Q We still see that desk.

21 A Yes.

22 Q We still see that lamp that you did find.

23 A Yes.

24 Q We still see that computer that you did find
25 evidence of.

1 A I don't see the computer.

2 Q The back of it right there, the iMac? (Indicating.)

3 A Oh, no, I didn't find that -- I didn't find the
4 screen, the monitor, no.

5 Q Oh, you did not?

6 A No.

7 Q Okay. And this thing over here to the left, the
8 secretary, you didn't find any evidence of that?

9 (Indicating.)

10 A No, sir.

11 Q This is Exhibit 376. This was one of Jeremy Woods'
12 photos taken the morning after the fire. Still smoking. You
13 see that?

14 A Yes, sir.

15 Q Was that the condition it was in after-- You were
16 there on December 1, weren't you?

17 A No, sir. December 2.

18 Q December 2?

19 A Yes.

20 Q Okay. Who did you report to at Cincinnati?

21 A Matt. I can't remember his last -- I can't recall
22 his last name.

23 Q Matt Kentner?

24 A Yes.

25 Q Did you talk with Mr. Ferrell in December of 2011?

1 A Yes, I did.

2 Q He's not your lawyer, is he?

3 A No.

4 Q Okay. Why were you talking to Mr. Ferrell?

5 A He was representing Cincinnati.

6 Q Okay. And at that point in time you had not given
7 any indication as to what you thought the cause of the fire
8 was?

9 A No.

10 Q You didn't issue your report until February?

11 A No.

12 Q And the Banks had not turned in their contents list?

13 A No.

14 Q Okay.

15 A That's not an uncommon thing.

16 Q All right. Let's look at another photo. This is
17 going to be Exhibit 377. This is another shot of the office,
18 right?

19 A I can't tell. Yes. Yes, it is.

20 Q Okay. This is another one of Jeremy Woods' photos.
21 Smoke still coming up. You see those items down at the
22 bottom? Can you identify those?

23 A Where are you referring to?

24 Q Well, the blue, the blue -- that looks like a
25 blue-and-pink CD.

1 A Oh, those were magazines.

2 Q How about that? (Indicating.)

3 A Those are magazines.

4 Q What about that? (Indicating.)

5 A Magazines.

6 Q Where were those?

7 A Right there on top.

8 Q Right. Where were they before the fire?

9 A Probably in the attic, because that's on top of the
10 debris. That's where I would -- my opinion would be they came
11 from.

12 MR. McWHERTER: Can you zoom in, Lori, right there?
13 And I'm going to get rid of that.

14 (Brief pause.)

15 BY MR. McWHERTER:

16 Q Now, what is that?

17 A Looks like a magazine.

18 Q You see where it says "Word"?

19 A Yeah. I do.

20 Q And then do you see the camera box below it or --

21 A I do.

22 Q Okay. Let's look at the next photograph. Be 3 --
23 Exhibit 385. Okay. We're standing -- just so everybody's
24 clear, we are standing right there. (Indicating.) Correct?

25 A In the hallway, yes.

1 Q And to the right we see Bedroom 2, what used to be
2 Bedroom 2.

3 A Correct.

4 Q And to the left we see the office. And where that's
5 sticking up right there used to be a stud wall separating the
6 two. (Indicating.)

7 A Correct.

8 Q That seems to be the only one of the stud walls that
9 are still remaining along that line, right?

10 A In that area? Is that what you mean?

11 Q Yes. There used to be a wall that was right there.
12 (Indicating.) And now we see one little stud sticking up out
13 of the ground. Correct?

14 A Yes.

15 Q And then if you look over there-- So if you would
16 have walked to the left of that stud wall and gone straight
17 back, you would have walked into the new addition?

18 A Yes.

19 Q And to the left of where the opening used to be,
20 there is a part of a brick wall that's gone. You see that?

21 A I'm not sure where. Can you point out where you're
22 talking about?

23 Q Sure. (Indicating.) Right there.

24 A That used to be a window.

25 Q All right. Let's go back and look at the pre-loss

1 photo, please. Do you see a window in that photo? That's
2 Exhibit 421.

3 A Let me stop you here. You're not following what I'm
4 saying. The window, when the house was added onto, was framed
5 in and covered. There is another one just like it in
6 Bedroom 2.

7 Q Okay.

8 A So, yeah, at the time this -- at the time of the
9 fire, there wasn't a window there, but it had been framed in.

10 Q Let's go back to the other one. That was the--
11 This is your photo, right? (Indicating.)

12 A I believe --

13 Q We've got it marked as Sells Photo 19, Exhibit 385.
14 This is what it looked like when you were there?

15 A Yes.

16 Q And this is before you did any digging?

17 A Correct.

18 Q So the first time you got there, nothing had been
19 changed?

20 A Not to my knowledge.

21 Q That is what it looked like?

22 A Right. Absolutely.

23 Q There is no roof?

24 A Right.

25 Q Whatever shingles there were are in the debris?

1 A Right.

2 Q Whatever flooring/roof joists there were are in the
3 debris?

4 A Yes.

5 Q I don't see many of those, do you?

6 A There's a few of them there, right in the center of
7 the photo. There's some here. (Indicating.) There's a few
8 of them laying around there.

9 Q All right. Let's go to the next photograph, which
10 would be 386, Exhibit 386. Okay. Now we're standing over
11 here in the corners, right over there, looking back over here
12 toward that saddle burn, right? (Indicating.)

13 A Yes.

14 Q Okay. Was that before, or after, you had done any
15 digging?

16 A Before.

17 Q So when this photograph was taken, nothing had been
18 changed, the scene had not been altered?

19 A No. These are preliminary pictures.

20 Q Okay. Looking at the brick wall behind us, you see
21 that the studs are gone?

22 A Yes.

23 Q Not behind us, but the brick wall shown in this
24 photograph, there are no studs?

25 A There's remains of some, yes.

1 Q Most of them have been burned completely away? Even
2 the top plate over on the left side has been burned away?

3 A Yes.

4 Q Right there? (Indicating.)

5 A Yes. We still have studs here. (Indicating.)

6 Q Okay.

7 A That's an indicator of fire coming from here.
8 (Indicating.)

9 Q All right. Anything else you want to add?

10 A No, sir.

11 Q Let's go on to the next one, which would be 387.

12 Now, this is a closeup of the photo we just looked at. What's
13 that sitting in that saddle burn?

14 A The bottom of a chair.

15 Q Is it the same chair that was shown in the pre-loss
16 photo?

17 A I -- I don't know.

18 Q It's a chair?

19 A It's a chair. It's very possible.

20 Q Could be that chair, not might be, but it's a chair.

21 A It's a chair, yes.

22 Q Okay. And it's sitting-- That's before you touched
23 it, right?

24 A Yes.

25 Q That-- You found it in that condition?

1 A Yes.

2 Q So we do know that there was a chair on top of the
3 saddle burn, that burned, and when the fire was put out, it's
4 sitting there?

5 A Yes.

6 Q That's the way you found it?

7 A That's the way I found it.

8 Q Okay. Let's look at Exhibit 417. This is
9 Exhibit 417. Got that chair turned up upright now. You see
10 the legs coming off here, here, here, here, here?
11 (Indicating.)

12 A Yes, sir.

13 Q That's the same chair, right?

14 A Appears so.

15 Q All right. Let's look at Exhibit 475, please.
16 Strike that. Go to Exhibit 1 -- 388. Exhibit 388 is a shot
17 of the office. Got the Bedroom 2 over to your right.
18 Correct?

19 A Correct.

20 Q Got that old stud wall that's no longer there, and
21 then we're looking at the office, looking at these holes,
22 right? (Indicating.)

23 A Correct.

24 Q Look down there in the bottom left, right there.
25 (Indicating.) See anything there?

1 A There's something there.

2 Q What would -- if a chair was to burn, what would
3 survive, if you had a big flashover fire, what might remain?

4 A Depends on kind of chair it is.

5 Q What about just a regular old upholstered chair?

6 A There's a lot of factors you've got to plug into
7 that.

8 Q Okay. What if it had springs? Would those remain?

9 A Yes, they would.

10 Q Okay. If you had a desk, you know, 10-by-10 room
11 and a flashover fire, what might remain of it?

12 A Possibly metal hardware.

13 Q Hardware. Okay. Anything else you can think of?

14 A Like I say, there's more factors you have to put
15 into it, but...

16 Q What about that desk we just looked at at the Banks'
17 house? What would you think might exist on that one?

18 A Probably the drawer slides, the metal hardware for
19 the pulls, legs, if they're metal. It just depends on how
20 long it burnt and that type of thing.

21 Q Now, we see some things back in here in this pile.
22 (Indicating.) What's all this? Can you tell?

23 A I can't tell from here.

24 Q All right. What's this? Let me clear some of this
25 out. See this right here? (Indicating.) That's the light

1 fixture, isn't it? Can you tell?

2 A I can't tell in this picture.

3 Q That's fine. We're going to get some better ones.

4 Let's go to Exhibit 389. Okay. We know that this is your
5 photograph, Sells 147, your photograph. It's Exhibit 389.

6 Recognize that hole?

7 A No.

8 Q Do you know if the hole was right there?

9 (Indicating.) As soon as you walked in the room, looked to
10 your left, was there a hole there?

11 A I don't recall. I'd have to look at some photos of
12 the room to tell. I don't even know what part of the house
13 this is.

14 Q Okay. Well, let's just-- I'll ask you what you can
15 see. We'll let the jury deduce what they think -- what they
16 want to think. But right there, what is that? (Indicating.)

17 A That's springs to what would look like to be a
18 sitting chair, recliner chair, something like that.

19 Q Okay. I want to show you another photograph of
20 Exhibit -- this one's 380. There's that same pile. You see
21 that brick wall there this time?

22 A Yes.

23 Q Do you recognize the area yet?

24 A That would be in the old part somewhere.

25 Q Okay. You see the pile. You see the springs. You

1 see the brick wall there. Is there anything identifying it
2 that we could look at from another photo? Maybe go back to--

3 Okay. Lori, go back to Exhibit 386.

4 Okay. Back there where that chair was in the
5 photograph, in the back left, right back in there --
6 (Indicating.)

7 A Uh-huh.

8 Q -- do you recognize that as the same area we just
9 looked at on the last photograph?

10 A Could be.

11 Q Let's zoom in a little closer.

12 Can we do that, Lori?

13 Well, it's not too clear. But it could be, do you
14 think?

15 A Yes, sir.

16 Q Now let's look at Exhibit 390. Okay. You see the
17 lamp?

18 A Yes, sir.

19 Q This is in the office, right?

20 A I believe so.

21 Q And this is -- right here would be the old opening
22 to the old house, right?

23 A The doorway, yes.

24 Q And then if you walk out that, you look down into
25 that 18-inch drop you said was there?

1 A Right.

2 Q Okay. And do you see anything else in that
3 photograph, any other contents?

4 A Something round up here. (Indicating.) I can't
5 tell what that is.

6 Q That CD maybe?

7 A I don't know.

8 Q Did you find any drawer slides?

9 A No.

10 Q What about that thing right there? (Indicating.)
11 What is that? Not a drawer slide?

12 A Wasn't a drawer slide.

13 Q Absolutely not a drawer slide. Okay. And this area
14 right here is where you had the Sample 3, right?
15 (Indicating.)

16 A Yes.

17 Q Where that hole is?

18 A I believe so. It's hard to tell from this view. I
19 don't know if it was here, or here. (Indicating.)

20 Q Well, will you-- We looked at the photograph, and
21 the Sample 3 was right up by the door. That was your straight
22 line theory. Remember?

23 A Okay. Yeah.

24 Q Isn't that right?

25 A Okay.

1 Q Okay. What was there? Where that hole was, what
2 was sitting right there before the fire?

3 A In front of the doorway?

4 Q No, no, not in front of the doorway. Where the hole
5 is.

6 A This is the doorway. (Indicating.)

7 Q Right there, that's brick right there.

8 (Indicating.) Hold on. Let me get rid of all your markings.
9 That's brick right there, correct? (Indicating.)

10 A No. That's the threshold of the doorway.

11 Q Okay. Was there -- was there a hole there of any
12 kind before the fire?

13 A I wasn't there.

14 Q Okay. Let's go back and look at pre-loss. What's
15 down there? (Indicating.)

16 A That's an air condition vent.

17 Q Okay. Hole in the hardwood, isn't it?

18 A Sure.

19 Q That desk we see wasn't there.

20 A No.

21 Q Absolutely not.

22 A After the fire, no.

23 Q The computer wasn't there. The lamp was there.
24 What about that cuckoo clock? Did you find it?

25 A Not that I recall, no.

1 Q Okay. Let's look at Exhibit 391. Going to look at
2 Exhibit 391 that came from the state fire marshal's file. And
3 Mr. -- look at me, Mr. Sells, if you would, and tell me, were
4 you there with the state fire marshal?

5 A We were there at the same time.

6 Q There at the same time. Okay. Looking at this
7 photograph -- still of the office, correct?

8 A Yes, sir.

9 Q And do you see some debris?

10 A Yes, sir.

11 Q Okay. Starting down here, that's -- what's that?
12 Anything of significance? (Indicating.)

13 A I can't tell.

14 Q Okay. Is that the light fixture? You can only see
15 where the top of it would have gone up in the ceiling. Can
16 you tell?

17 A I can't tell, no.

18 Q And we have this lamp up there, right?
19 (Indicating.)

20 A Correct.

21 Q We've got this metal thing right there. What's it?
22 The big thing.

23 A I believe that's part of the printer.

24 Q Part of-- So the printer was there?

25 A I think it was the printer. I don't know.

1 Q Printer, computer --

2 A Something.

3 Q -- one of the two, something.

4 A Computer tower. It wasn't a monitor. Put it that
5 way.

6 Q And when you dug through it, did you find any metal
7 pieces? Any metal drawer slides?

8 A No.

9 Q Did you find any -- any rollers?

10 A No.

11 Q You didn't find any pieces of the desk?

12 A I did not, no.

13 Q And you didn't take any pictures of them, 'cause
14 we've got your photos. You don't -- you don't have any
15 pictures of metal pieces.

16 A No. I didn't find any.

17 Q Okay.

18 Lori, let's -- let's zoom in a little bit, please.

19 Right up here. (Indicating.) A little more.

20 See any drawer slides?

21 A No, I don't, not that I can identify.

22 Q That right there? (Indicating.)

23 A I'm not sure if that's a drawer slide. I can't --

24 Q That right there? (Indicating.)

25 A No, it doesn't look like a drawer slide to me.

1 There's no roller in it. There's no other hardware. It
2 doesn't look like a drawer slide to me.

3 Q Absolutely not a drawer slide.

4 A Doesn't look like one to me.

5 Q Okay. Let's look at Photo 381, please. Still in
6 the office, right?

7 A Yes, sir.

8 Q Same old picture. There's those big old holes in
9 the floor and piles of stuff on the right side. Let's look--
10 What is this burn spot right there? (Indicating.) That's--
11 Something was sitting there?

12 A It's a protected area, yeah.

13 Q Something somehow some way. Okay.

14 Let's zoom in up in the right-hand corner if we can,
15 Lori. Looking at Exhibit 381. Scroll over.

16 Little bit better picture there. Can you identify
17 the -- any drawer slides now?

18 A I can't tell if that's drawer slides or not.

19 Q We've got some old wood pieces there. Can you
20 identify those?

21 A No.

22 Q Did you put those metal pieces in a -- in one of
23 your boxes?

24 A No.

25 Q One of your evidence boxes?

1 A No.

2 Q Put the computer in your evidence box?

3 A No.

4 Q Did you put the lamp in your evidence box?

5 A No.

6 Q Those springs we saw over in the left side, did you
7 pick those up and put them in your evidence box?

8 A No.

9 Q Let's talk about the secretary for a minute. Assume
10 it was in there in the room at the time of the fire and we
11 have a flashover, everything combusts and starts burning. And
12 if that thing was sitting there, it could cause holes to burn
13 in the floor, too, couldn't it?

14 A I don't believe so.

15 Q No? Well, we know that the NFPA says that if you've
16 got something sitting on the floor or close to the floor, it
17 can cause holes and saddle burns. You told me that three
18 minutes ago. You still agree with that?

19 A Every -- every scenario is not the same. If you
20 take the construction of that floor, as thick and as dense as
21 that floor was, it would take more of a fuel load than that
22 secretary to penetrate the floor and cause that kind of saddle
23 burn.

24 Q You --

25 A Now, in my house, where there's just carpet,

1 padding, and a subfloor, good chance you'd get it.

2 Q You took a sample where the secretary was sitting.
3 That would be S2, right?

4 A I guess so. I don't remember.

5 Q Came back negative.

6 A Okay.

7 Q But there's holes in the floor, right?

8 A Yeah.

9 Q Small holes. Let's look at Photo 3 -- 382, what we
10 were looking at. Let's look at 382.

11 MR. SCOTT: Same thing. It's the same thing.

12 MR. McWHERTER: Let's just keep it right here. Can
13 you back up a little bit?

14 BY MR. McWHERTER:

15 Q Mr. Sells, did you take those metal rollers right
16 there—you can't identify them as rollers—metal pieces and
17 throw them in that hole to the left? (Indicating.)

18 A It's possible.

19 Q All right. Let's look at Exhibit 384, please. So
20 now we're standing in the opening of the office, looking out
21 into the area where the master foyer used to be, right?

22 A I assume so. This up in the right corner looks odd
23 to me, looks different, but...

24 Q Well, we see there's that same window you said
25 existed before the wall. And there's the hole, right there,

1 where you said -- where the HVAC rent was. (Indicating.)

2 A Okay.

3 Q And here's the opening. (Indicating.) If you
4 look --

5 A Okay. I'm with you, yeah.

6 Q So if you walk through there, you'd go right to the
7 laundry room, correct?

8 A Yes.

9 Q And there's a drop there, right? From main level,
10 there's a drop downward?

11 A Yes.

12 Q Can you tell if it's further than 18 inches?

13 A Not in this picture, I can't.

14 Q In fact, there was a heat furnace that fell all
15 the-- That's what that is, right? (Indicating.)

16 A Yes. It's not very wide, though.

17 Q But the furnace was in the attic, right?

18 A I don't know.

19 Q You don't -- well, you don't know where it was at
20 prior to the fire? Was it near the area of origin?

21 A It was -- had to be if it fell right there.

22 Q Okay. Did you ever ask Mr. Banks?

23 A Again, no.

24 Q Because?

25 A I was instructed not to talk to him.

1 Q If you could do things your way, you would have
2 talked to him, wouldn't you?

3 A Probably so, yes.

4 Q Because to be objective and unbiased you need to
5 talk to people because there's facts that only the homeowner
6 would know?

7 A Sure.

8 Q Let's look at Exhibit 423. Okay. Mr. Sells, we're
9 looking at Exhibit 423. See those holes?

10 A I do.

11 Q That's where the Sample S2 was taken, where the
12 secretary was, right?

13 A I believe so.

14 Q Okay. You see this right there? (Indicating.)

15 A I do.

16 Q And you see that outline right there? (Indicating.)
17 Let me get rid of my markings so you can see it.

18 A I do, yes.

19 Q And do you see that outline across the top, about an
20 inch below the line I just made? (Indicating.)

21 A No.

22 Q You can't see a rectangular shaded area in this
23 photograph, Exhibit 423?

24 A I see two sides. I see a left and right.

25 Q You see that, and you see that, but you don't see

1 the one across the top? (Indicating.)

2 A I don't see one across the top.

3 Q If you see a shaded area like that, it tells you
4 something was there at the time of the fire, right?

5 A Well, if it was shaded lighter, it would make me
6 think so. But it's shaded darker.

7 Q Well, the fire burned all night long?

8 A I can't-- I don't know if the fire burned in this
9 area all night long or not.

10 Q Let me ask it this way: You-- People make
11 mistakes. Is it possible that you were mistaken that the
12 secretary wasn't there prior to the fire?

13 A No.

14 Q And when you look at this picture you see nothing?

15 A No, I see -- I see what you're talking about, the
16 darker shaded areas. But that doesn't make me want to think
17 that there was a secretary there.

18 Q Okay. Fire patterns are important to you? That's a
19 fire pattern, isn't it?

20 A That's a material loss pattern.

21 Q That's-- This is a fire pattern? You don't
22 disagree with that?

23 A No, I don't think it's-- I wouldn't call it a fire
24 pattern, no.

25 Q I-- Jury's listening to you. I want you to-- Just

1 tell them. In your opinion, this picture does not help or
2 assist you at all in your investigation?

3 A There's something odd to it because of the
4 discoloration.

5 Q And did you ever ask Mr. Banks if he had -- if there
6 was something there prior to the fire?

7 A Again, no. I didn't talk to him but twice briefly.

8 Q Is it still your opinion there was no desk?

9 A Yes.

10 Q Is it still your opinion there was no secretary?

11 A Yes.

12 Q Is it still your opinion there was no computer?

13 A Yes.

14 Q Is it still your opinion there was no chair?

15 A Yes.

16 Q The only thing you found was a lamp --

17 A Correct.

18 Q -- and a piece of the printer and a chair --

19 A Correct.

20 Q -- that was sitting in the saddle burn?

21 A The chair was.

22 Q Let's look at Bedroom 2, Exhibit 470 -- 420, sorry,
23 420. Now, Bedroom 2 did not suffer-- Was it-- Was the
24 damage just as bad in Bedroom 2?

25 A I think it was a little lighter.

1 Q A little further away from the area of origin?

2 A I don't think it was any further away. I just think
3 it was a little lighter damage.

4 Q A little lighter damage. Okay. Fire a little less
5 heavy in that area?

6 A Yes.

7 Q Okay. So this is a pre-loss photo, correct?

8 A Yes.

9 Q We see a bed, see a piece of furniture over there to
10 the left. Let's look at some post-loss photos. Starting with
11 Exhibit 392, you're standing in the doorway again, same old
12 place, right here, looking over towards Bedroom 2. Is that
13 how it looked?

14 A Yes, sir.

15 Q And this is Jeremy Woods' photo, so we know it was
16 taken shortly after the fire. Is that how it looked when you
17 got there?

18 A Yes.

19 Q You see some bricks laying on the ground.

20 A Yes, sir.

21 Q That tells you what?

22 A That the wall fell.

23 Q Wonder how that happened.

24 A Several different ways.

25 Q Drop-down might have hit it?

1 A No, I don't believe that would knock a brick wall
2 down. Could have been partial collapse from the other side.
3 Could have been firefighter's hose stream. That would be my
4 guess.

5 Q "Firefighter's"?

6 A Hose stream.

7 Q "Hose stream." Okay. Let's talk about
8 firefighters. When they come in, they do a thing called
9 "salvage and overhaul," right?

10 A I can't speak to what Manchester Fire Department
11 does.

12 Q You've been a firefighter how many years?

13 A Twelve, thirteen years.

14 Q You know what firefighters do and don't do?

15 A I know what they're supposed to do, yes.

16 Q Okay. And the salvage and overhaul process is when
17 the firemen come in after the fire and they start ripping off
18 sheetrock, pulling everything out, and trying to make sure
19 there's no flames left?

20 A That's not true.

21 Q Isn't that the goal --

22 A No, that's not true.

23 Q -- to make sure there's no embers?

24 A That's not even close to being true.

25 Q What do they do? They're there for--

1 A They don't gut sheetrock and tear the building--
2 They don't do all that. No, they do not do that.

3 Q Do they tiptoe in and just very gently --

4 A Well, in today's firefighting they've got thermal
5 cameras that they enter the rooms with, and they can see into
6 the walls and see if there's any extension of the fire. If
7 there is, then they'll do as minimal damage as possible to
8 extinguish that.

9 Q Is it your testimony under oath that the-- You
10 interviewed those firemen, right?

11 A Yeah.

12 Q You took statements from them?

13 A Yeah.

14 Q And you know what the statements say, or at least
15 you've read them?

16 A Yes.

17 Q Did you take them, or did Mr. Woods take them?

18 A They prepared them and brought them to me.

19 Q Okay. You read them?

20 A Yes.

21 Q Jury's sitting here.

22 A Yes.

23 Q Is it your testimony under oath that these firemen
24 didn't jerk off sheetrock and do everything they could to try
25 to make sure that there was no embers left?

1 A I don't recall them saying that at all, no.

2 Q Did you find a bed in Bedroom 2?

3 A Yes, sir.

4 Q Did you find any bedding?

5 A There was some lenning in that closet, I believe.

6 Q Did you find any bedding that was on the bed?

7 A No.

8 Q Did you find the mattress?

9 A Found the springs.

10 Q Okay. Any-- Find pillows?

11 A No.

12 Q What happened to them?

13 A Probably burned away.

14 Q Okay. Let's look at Exhibit 393. This is just a

15 closeup of Bedroom 2, correct?

16 A I believe so.

17 Q And we see these bricks that came from some unknown

18 source, maybe a water hose. And there's a bed under there

19 somewhere? This is before you started digging?

20 A Yes, sir. And if you look right there, you'll see

21 the end of the mattress.

22 Q Okay. And we see a hole over here on this side?

23 (Indicating.)

24 A Right.

25 Q You take a sample of that one?

1 A Yes.

2 Q Came back negative?

3 A Yes.

4 Q Something was sitting there, too, did you say? A
5 chair?

6 A A chair was in that area.

7 Q And you found evidence of the chair?

8 A Yes.

9 Q Let's look at Exhibit 395. This is after you
10 excavated it, right?

11 A Yes, sir.

12 Q There's the bed?

13 A Yes, sir.

14 Q There's the mattress springs, right?

15 A Correct.

16 Q Where's the bed frame?

17 A Wasn't located.

18 Q So one of two things happened—either an arsonist
19 took the mattress off of the bed frame and put it on the
20 ground, or the bed frame burned up?

21 A I don't know what type of bed frame it was to-- If
22 it was wood, it could have possibly burned away. But if you
23 look also up here, we did find the posts to the -- to the
24 headboards.

25 Q That's right. We did. And there's-- How many

1 posts did you find?

2 A Looks like just that one in that room.

3 Q What about the footboards?

4 A No, no remains of that.

5 Q It's true, isn't it, that sometimes fires just burn
6 stuff up because that's what they do?

7 A Depending on the materials, yes, sir.

8 Q Okay. You're right. Fire burns wood.

9 A Yes.

10 Q And let's look one more Bedroom 2, and that's
11 Exhibit 396. This is one of your photographs, Mr. Sells.

12 A Okay.

13 Q Let me get rid of my markings. There is that bed
14 back there, right? (Indicating.)

15 A Yes, sir.

16 Q Also a rug.

17 A Yes, sir.

18 Q Evidence left. And there's also the runner that was
19 running into the office that was found, right? The one
20 that -- this rug that ran right there? (Indicating.)

21 A At the very end of the hallway?

22 Q In the hallway?

23 A Yeah, at the other end, yes, sir.

24 Q And right here there are some pieces of something.
25 (Indicating.) What are those?

1 A That's stud wall.

2 Q Stud wall. Okay.

3 A Oh, hold on. Hold on. Can we zoom in on that?

4 Q We can. Be happy for you to.

5 A It distorts too bad. I do believe we found a small
6 nightstand or something as well in this room.

7 Q You've got it stacked up on the office side?

8 A I had it stacked up that wall. That's the area we
9 found it. When it was excavated, it was found right there.
10 But I believe in the pre-fire pictures there was some type of
11 small furnishing in there.

12 Q Okay. You got to the scene on December 5th, Monday,
13 after the fire?

14 A Yes.

15 Q Correct? And on the first day -- actually you
16 started your investigation, started scooping just -- you-all
17 did the office and Bedroom 2 on that first day, that Monday,
18 December 5th, right?

19 A Yes.

20 Q Then your records show that your excavator showed up
21 on Tuesday, December 6th, and was gone on Friday,
22 December 9th. Sound right? Four days with the excavator?

23 A I believe so.

24 Q So it was in those four days that you dug out the
25 addition?

1 A Yes.

2 Q Okay. And you did that with a shovel?

3 A Well, and heavy equipment, shovels, small shovels.

4 Q Scoop?

5 A Yes.

6 MR. McWHERTER: Lori, go to Exhibit 399.

7 BY MR. McWHERTER:

8 Q If you were standing at the doorway in the office,
9 looking out into the new addition, this is what you would see,
10 correct? After the fire. Before you dug.

11 A Which way are we looking?

12 Q Let me help you. Here's the-- You see that sunroom
13 right there? (Indicating.)

14 A Yes.

15 Q And you see on the far side of the picture, straight
16 across, you still see it going up?

17 A The arch.

18 Q Right there, where it was. So that picture is taken
19 from the office, looking out at it. Do you agree?

20 A Is it super-zoomed in, or-- It just doesn't look
21 right to me. I'm trying to get it -- straight with it.

22 Q But this is what it looked like before you dug it
23 out, the addition --

24 A Okay.

25 Q -- correct? And let's look at Exhibit 400.

1 A Okay. That looks better.

2 Q This is before you took the front wall down.

3 A Yes, sir.

4 Q Right?

5 A Yes, sir.

6 Q So that's what it looked like?

7 A Yes, sir.

8 Q There is no evidence of a third floor anymore?

9 A Right.

10 Q And so you said that the third floor fell onto the

11 second floor. There's not a lot there.

12 A No, but you can see the -- the joists. All those

13 are joists coming down. (Indicating.)

14 Q So it's your testimony that in four days, with a

15 small shovel and trowel, you hand-scooped and pieced through

16 every square inch of that addition in four days?

17 A You're talking four days with myself, other

18 investigators, and the use of heavy equipment, yes.

19 Q So you didn't hand-scoop every bit.

20 A Not every shovelful, no. There was other

21 investigators there as well.

22 Q And the things that you put in your boxes, in your

23 ten boxes, they all came from one place, right?

24 A Yes.

25 Q And that was all just in one little area, the front

1 portion of this closet? (Indicating.)

2 A And-- Right. Yes. Yes.

3 Q So in this entire thing, 3600, 4000 square feet,
4 that's the only area that you put in -- that's the only place
5 you found things to put in boxes?

6 A No.

7 Q Why didn't you put other things in boxes?

8 A We took the fire debris samples. Those were put in
9 cans. The evidence of the clothes was something I was
10 instructed to get, so I got them.

11 Q Did you pick up all the clothes?

12 A All of them that I could find, yes.

13 Q Going back, did you -- are you telling the jury that
14 in four days you took your shovel and you dug through three
15 stories of debris and sifted it and looked for every single
16 piece of item that could possibly be there?

17 A Yes, sir. Me and the other investigators did.

18 Q Look at them.

19 A Yes. Myself and the other investigators did.

20 Q You did find a washer and dryer?

21 A Yes, sir.

22 Q You did find evidence of furniture in the addition?

23 A Yes.

24 Q You did find furniture springs in the addition?

25 A Yes.

1 Q You did find a television in the addition?

2 A I believe we found two.

3 Q You found a cable box?

4 A Yes.

5 Q You found other electrical equipment?

6 A Yes.

7 Q You found a sleeper sofa?

8 A Yes.

9 Q You found a dehumidifier?

10 A Yes.

11 Q You found a Hide-a-Bed?

12 A Yes.

13 Q You found evidence of a couch or chair springs?

14 A Yes. You've already stated that.

15 Q You found clothing?

16 A Yes. And an assault rifle.

17 Q And except for the clothing and the jewelry, none of

18 those things you put in boxes?

19 A Right.

20 Q There's been some testimony about the items that you

21 put in your boxes. Mr. Caldwell with Enservio, have you ever

22 met him?

23 A Yes, I believe so.

24 Q Michael Caldwell? You ever talked to him?

25 A Very brief.

1 Q When he went to look-- You took your boxes and you
2 took them to EFI Global where you worked at the time?

3 A Yes.

4 Q And you put them in storage?

5 A Correct.

6 Q And it was a secure place?

7 A Yes.

8 Q And nobody else can get in there and sneak stuff in
9 the boxes?

10 A No.

11 Q No? Okay. Mr. Caldwell said that he found 40 items
12 in those 10 boxes. Did you have -- did you put more than 40
13 items in there?

14 A I didn't count the items.

15 Q Do you have any idea?

16 A No.

17 Q Let's go back to Exhibit 400. Okay. Mr. Sells,
18 this is, again, standing in the office, looking toward the new
19 addition, looking this way, right? (Indicating.)

20 A Yes, sir.

21 Q Where did you find -- point to me, where did you
22 find the jewelry that you found?

23 A You won't be able to see it in this picture. It's--
24 If we could take this block wall out here, we would be able to
25 see that corner. But it's --

1 Q Over in that corner? (Indicating.)

2 A It's around that corner in there. (Indicating.)

3 Q What was on -- what used to be on the other side of
4 this wall right here, and there? (Indicating.)

5 A Which way?

6 Q Let me start over. What was right in there before
7 the fire? (Indicating.)

8 A That was the foyer, wasn't it? Master foyer?

9 Q Well, you're standing in the opening. That's where
10 the foyer would be. To the left --

11 A No, you're standing in the office and master bedroom
12 right here, taking the picture. This is the master foyer in
13 here. (Indicating.) Am I wrong?

14 Q How about this? Let's just look at here. You see
15 these-- Looking at the board, which is -- unknown exhibit.

16 What exhibit is this?

17 (Off-the-record discussion.)

18 MR. FERRELL: 105.

19 BY MR. McWHERTER:

20 Q 105. Look at Exhibit 105.

21 A Okay.

22 Q This shows some stairs and one big walk-in closet
23 area, right?

24 A Yes.

25 Q Do you know if that's correct?

1 A I believe it to be. That's the diagram we've got.

2 Q This was done well after the fire, right?

3 A Right.

4 Q You didn't do this?

5 A No.

6 Q And you never saw this before you rendered your
7 opinions?

8 A No.

9 Q Okay. Do you personally know what the layout of the
10 walk-in closet area was?

11 A Just from the virtual tour pictures, I've kind of
12 got an idea.

13 Q Was it one big open area like that?

14 A No, the way I understand, it was divided.

15 Q Where was the dividing line at?

16 A I understand there was a wall-- Well, how do you
17 want me to show you?

18 Q I think I've got --

19 THE COURT: Mr. McWherter, would it be possible for
20 us to take a short break and you pick up after that?

21 MR. McWHERTER: Yes.

22 THE COURT: All right. Let's take a ten-minute
23 break, and then we'll be back.

24 (Brief recess.)

25 THE COURT: You may continue.

1 MR. McWHERTER: Thank you, Your Honor.

2 Mind I have the Elmo, please?

3 THE CLERK: Oh, I'm sorry.

4 BY MR. McWHERTER:

5 Q Okay. Mr. Sells, this is the diagram of the first
6 floor again.

7 A Okay.

8 Q You've seen that before.

9 A Yes.

10 Q Okay. Now, over here on the section in the addition
11 labeled "Walk-in Closet," "WIC," I'm going to hand this to
12 you, and I want you to mark on it how the walls were set up in
13 that room.

14 A Oh, I'm not sure-- What I was under the impression
15 was that there was some type of divider in this area.

16 (Indicating.) I don't know if it was a wall or how it was
17 divided. But that was my impression of what was there.

18 Q You saw the photos earlier Mr. Chastain showed you
19 of the shoes on the shoe racks?

20 A Yes, sir.

21 Q Where was that in the room?

22 A In this area. (Indicating.)

23 Q Right there?

24 A (Indicating.)

25 Q Okay. I want you to mark that—I'm going to have to

1 hand this to you—with a pen.

2 May I approach, Your Honor?

3 THE COURT: You may.

4 BY MR. McWHERTER:

5 Q Put a small X right where you say those shoes were.

6 And also draw the dividing line where you say it was --

7 A Okay.

8 Q -- any walls that were within that square.

9 A (Witness complying.)

10 Q Okay. The X you've marked is where the shoes were?

11 A I believe so, yes.

12 Q And the line is where you think the wall was?

13 A Like I say, I don't know if it was a wall, but it
14 was some type of a divider, is what I was informed of, that
15 divided Mrs. Banks' and Mr. Banks' closet area.

16 Q You were never in the house before the fire, I
17 assume?

18 A Oh, no.

19 MR. McWHERTER: Let's mark this as exhibit next, by
20 agreement, I think.

21 THE COURT: All right. That would be?

22 MR. McWHERTER: 443, Your Honor.

23 THE COURT: 443. And it is a marked version of 105,
24 I think.

25 MR. McWHERTER: Yes.

1 THE COURT: 443 is a marked version.

2 MR. McWHERTER: With markings by Mr. Sells.

3 THE COURT: Okay. Mr. Sells' markings. Thank you.

4 (Exhibit 443 was received into evidence.)

5 MR. McWHERTER: Let's look at Exhibit 402, please.

6 THE COURT: What exhibit was that?

7 MR. McWHERTER: 402.

8 THE COURT: Thank you.

9 BY MR. McWHERTER:

10 Q Mr. Sells, do you recognize this photograph?

11 A I do.

12 Q That's coming down the stairs into the basement,
13 right?

14 A Correct.

15 Q And that's rubble there? (Indicating.)

16 A That's debris, yes, sir.

17 Q Did you dig through it?

18 A Yes, sir.

19 MR. McWHERTER: Put this one up on the screen.

20 (Indicating.) Okay.

21 This one is not yet marked, Your Honor, but we'll
22 mark it by agreement in just a second.

23 BY MR. McWHERTER:

24 Q Mr. Sells, do you recognize this photograph?

25 A I do.

1 Q That is the area where the laundry room was sitting,
2 right? That area right there? (Indicating.)

3 A I think it would be more under the master foyer.

4 Q Okay.

5 A Right where the stairwell --

6 Q Right here, and goes all the way back.

7 (Indicating.)

8 A Well, we're not seeing that all the way back in the
9 picture. That's why I said under the foyer.

10 Q Okay. That corner right there is right there,
11 correct? (Indicating.)

12 A Yes, sir. I thought you was talking about the
13 basement block.

14 Q That corner that I just marked is right there.
15 (Indicating.)

16 A Yes. Yes. Yes.

17 Q This area right there, you didn't dig that, did you?
18 (Indicating.)

19 A No. This-- Well, let me rephrase that. This
20 area was --

21 Q Touch it. Show me what you're talking about.

22 A This. (Indicating.) Because all of this that's
23 here was moved from on this side this way -- (Indicating.)

24 Q Okay. So --

25 A -- if that makes sense. It was moved from the rear

1 to the front.

2 Q Are you testifying that you did dig this area?

3 (Indicating.)

4 A This area here, yes, sir. (Indicating.)

5 Q I want to make sure that we're talking about here.

6 That part you did? (Indicating.)

7 A Yes, sir.

8 Q That part you did not? (Indicating.)

9 A Correct.

10 Q And there's a gray line in there that we won't play
11 with. But the back part you did not dig?

12 A Correct.

13 Q The front part you did?

14 A Right.

15 MR. McWHERTER: Okay. We're going to mark this
16 photograph, by agreement, as Exhibit 444.

17 (Exhibit 444 was received into evidence.)

18 MR. McWHERTER: Just so our record is clear, if I
19 could have the Elmo.

20 BY MR. McWHERTER:

21 Q When I say "front part," I'm just going to put an X
22 here. That's the front. I'm going to put a circle for back.
23 Fair enough?

24 A Yes, sir.

25 Q Okay. Now, you prepared a cause and origin report

1 in this case, correct?

2 A Yes, sir.

3 MR. McWHERTER: Your Honor, we're now referring to
4 Exhibit 291, which is a redacted version.

5 If I could have the Elmo.

6 THE COURT: Thank you. Just one moment, please.

7 291?

8 MR. McWHERTER: That's the sticker I've got.

9 THE COURT: What would it be called?

10 MR. McWHERTER: Well, it's the EFI Global cause and
11 origin -- Mark Sells' cause and origin report.

12 THE COURT: I don't know. Maybe I'm-- I have a 291,
13 Home Source invoice, as being listed, and I'm somewhat
14 confused.

15 BY MR. McWHERTER:

16 Q Okay. Mr. Sells, you prepared a cause and origin
17 report, provided that to Cincinnati?

18 A Yes, sir.

19 Q And you provided that in February 2012?

20 A Yes, sir.

21 Q And you indicated in the report that the scene was
22 unsecured at the time of your arrival on December 2nd?

23 A Correct.

24 Q The only thing that was there at that time was some
25 yellow tape?

1 A Correct.

2 Q You came back on December 5th, there's now a
3 security guard there?

4 A Correct.

5 Q Did you look at the electrical panels with the
6 engineer, the electrical engineer?

7 A No, sir.

8 Q Did you look at the meter base?

9 A I did not.

10 Q You also indicated in your report, did you not, that
11 the meter base was not properly grounded?

12 A Yes.

13 Q And you also indicated that there was no driven
14 grounding rod or cable visible?

15 A That is in the report, yes.

16 Q And that's your report?

17 A Yes, sir.

18 Q That's the report that you gave Cincinnati Insurance
19 Company?

20 A Yes, sir.

21 Q You also said at the time of the report that
22 security of the building at the time of the loss is at issue,
23 right?

24 A Correct.

25 Q And you could not determine if there was forced

1 entry or not?

2 A Right.

3 Q You've since learned, haven't you, from
4 Mr. Fletcher, the first fireman in, that the back door was
5 unlocked?

6 A Yes.

7 Q And you said that you could not make a determination
8 as to the quantity or quality of any contents in the left-side
9 addition that was destroyed by the fire?

10 A Correct.

11 Q And you've never been tasked with the job of
12 figuring out what was there before the fire?

13 A No, sir.

14 Q You never have been tasked with the job of figuring
15 out what was there at the time of the fire?

16 A No, sir. At the time of the fire, yes. When I did
17 my inspection, I was.

18 Q But you --

19 A Not per items, but a general --

20 Q Well, what were you doing? Were you supposed to--
21 You weren't supposed to take an inventory?

22 A Correct. What I was asked when I received the
23 virtual tour pictures is, "The contents that you're finding,
24 does it match these pictures?"

25 Q But you didn't take an inventory?

1 A No.

2 Q And you didn't put everything you found in the
3 boxes?

4 A No.

5 Q You just put the stuff -- some stuff in boxes?

6 A Right.

7 Q And the only stuff you put in boxes, in those ten
8 boxes, is from one little area at the front of the addition?

9 A Yes.

10 Q You also said fire pattern analysis indicated the
11 fire had breached the ceiling of the addition and spread to
12 the attic of the remainder of the structure?

13 A Yes.

14 Q You put that in writing?

15 A Yes.

16 Q You gave that to Cincinnati?

17 A Yes.

18 Q Since that time you've since concluded that the fire
19 started -- or that a fire was started in the office?

20 A I did not.

21 Q No?

22 A No, sir.

23 Q The fire originated here, in the master bedroom?

24 (Indicating.)

25 A Yes.

1 Q You found an incendiary liquid, you say --

2 A An accelerant.

3 Q -- or you saw irregular burns, sent it off to a lab,
4 and those were in the office?

5 A Yes, sir.

6 Q I don't understand. You said the fire -- in your
7 report it says it went from the attic -- from the new
8 addition, through the attic, into the older part of the home.

9 A It did travel that way, yes.

10 Q Do you think it traveled both ways?

11 A Yes. I stated that earlier. Yes.

12 Q Where do you -- where was the match lit, in your
13 opinion?

14 A Excuse me?

15 Q Where was the match lit? You think somebody started
16 the fire.

17 A Oh. Earlier, like I stated, out the rear door, on
18 the deck.

19 Q So somebody stood where? Where did they light the
20 match?

21 A I think out on the rear deck somewhere, down the
22 steps of the rear deck.

23 Q Out in here? (Indicating.)

24 A On out a little further.

25 Q Out in here? (Indicating.)

1 A Yeah. Yes, sir.

2 Q And you took samples along this whole way?

3 A Yes, sir.

4 Q And you didn't find anything until you got to the
5 office?

6 A Correct.

7 Q It's your opinion, isn't it-- If we boil your
8 opinion down to a nutshell, it's two -- you base your opinion
9 on two things—your perceived lack of contents and the
10 positive samples?

11 A Yes, sir.

12 Q If the samples aren't positive, would that change
13 your opinion about the fire?

14 A No.

15 Q The lack of contents alone would do it for you?

16 A Yes, sir.

17 Q You are -- you are objective?

18 A Yes.

19 Q You're unbiased?

20 A Yes.

21 Q You have no expectation bias?

22 A No.

23 Q You're looking out for the Banks as much as you are
24 Cincinnati?

25 A Yes.

1 Q That's your job?

2 A Yes.

3 Q To be truthful?

4 A Yes.

5 Q To be accurate?

6 A Yes.

7 Q You also wrote in your report, did you not, that
8 contents providing the fuel load would include typical
9 furnishings, right?

10 A Part of the fuel load, yes.

11 Q And then you wrote, "Physical evidence and witness
12 statements indicate the fire originated in the interior master
13 bedroom area of the home. Interior construction of the area
14 consisted of wood stud walls covered with sheetrock. The
15 flooring consisted of wood subfloor covered with carpet.
16 Contents providing the fuel load would include typical
17 furnishings." That's what you wrote?

18 A Yes.

19 Q So at the time you wrote your report, you thought
20 there were enough contents to have a normal fuel load in the
21 addition?

22 A No, what I meant, "contents," construction contents.

23 Q Okay. You mean -- when you say "contents," you mean
24 construction?

25 A At that -- what you're referring to, yes.

1 Q So the sentence before that reads "Interior
2 construction of the area consisted of wood stud walls covered
3 with sheetrock. The flooring consisted of wood subfloor
4 covered with carpet." And then you say, "Contents providing
5 the fuel load would include typical furnishings," and by -- by
6 "furnishings" you're still meaning construction materials?

7 A I mean, just everything that's in there, whatever's
8 in there is providing the fuel load. The construction's a
9 fuel load. The carpet's a fuel load. Everything that's there
10 is a fuel load.

11 Q The point is, you put in writing that there were
12 furnishings in the home that would provide a fuel load?

13 A There was some furnishings, yes, but you're taking
14 it out of context.

15 Q Well, I'm not. I'll show it to you.

16 A No, I understand what you're saying, but you're
17 misinterpreting what I said.

18 Q You also wrote, did you not, that the third floor
19 was completely consumed by the fire?

20 A Yes.

21 Q Put that in writing?

22 A Right.

23 Q Regarding whether the fire was caused by-- You were
24 unable to rule out electricity as the cause of the fire?

25 A I was. But I've never had an electrical fire remove

1 contents and leave me positive samples.

2 Q Is it-- How do you know what's normal for a person
3 as far as furnishings and contents unless you talk to them?

4 A I don't.

5 Q Otherwise, you're just speculating.

6 A Unless I get pictures of what their house looked
7 like.

8 Q Why wouldn't you talk to them?

9 A Excuse me?

10 Q Why wouldn't you talk to them, to the Banks?

11 A Again, I was instructed not to.

12 Q If you had talked to-- Did you know that they had a
13 restaurant in Murfree-- in Manchester?

14 A Later I did.

15 Q Did you know that this was the Monday after
16 Thanksgiving and they had had all their family at The
17 Mercantile just a few days before for Thanksgiving dinner?

18 A Again, I did not interview the Banks. What was
19 reported to me is, what's in the pictures is what's supposed
20 to be there. That's the information I had.

21 Q That wasn't -- that wasn't reported to you by these
22 people. (Indicating.)

23 A No, it was reported to me by Stephen Pierce.

24 Q By Stephen Pierce, the same person who told you not
25 to talk to them.

1 A Exactly. That's his job.

2 Q You also could not rule out negligence as a cause of
3 the fire?

4 A Yeah. And, again, I've never seen negligence remove
5 contents and leave positive samples.

6 Q So, let me see, you've got electrical as a potential
7 cause?

8 A Correct.

9 Q You've got incendiary origin as a potential cause,
10 right?

11 A As the probable cause, yes.

12 Q And you've got negligence.

13 A Yes.

14 Q You can't rule out electrical or negligence, but you
15 go ahead and say that it's incendiary?

16 A Yes. I found evidence that overshadowed any
17 accidental causes.

18 Q You've never been wrong. You've never --

19 A No.

20 Q -- called a fire intentionally set and been wrong --

21 A No.

22 Q -- because you don't make mistakes.

23 A I do, but not -- not in a case like this. You asked
24 me if I ever had an incendiary set fire and been proven wrong.
25 I haven't.

1 Q Have you been wrong? How about not-- Let's take
2 away the word "proven."

3 A Never been proven. Not in my mind, I've not.

4 Q Is there any-- I mean, what would it take for you
5 to think maybe it was an electrical fire?

6 A I don't.

7 Q What if there was -- what if there really was this
8 electrical box in the laundry room, this panel, that you
9 didn't even see?

10 A It still wouldn't take the contents out of the house
11 and leave me positive samples. There's no kind of accidental
12 fire that's going to do that.

13 Q So your opinion—I want to make sure you're saying
14 this under oath—it all boils down to the contents. What if
15 the contents -- what if that's a nonissue?

16 A It doesn't all boil down to the contents.

17 Q What if the contents are taken out of the equation?

18 A I still have the positive samples, then, yes, I
19 would still...

20 Q Do you know what other typical items can make a
21 sample come back positive?

22 A I'm not a chemist, no, sir.

23 Q Do you know if the asphalt smoke residue from
24 asphalt shingles can come back looking like that?

25 A I've never heard of that except from one source, and

1 I don't believe that.

2 Q But you don't have any training in chemistry?

3 A No.

4 Q You don't believe it because you work for the
5 insurance company.

6 A That's not true.

7 Q You didn't notify the Banks that you were going to
8 excavate the scene, did you?

9 A No. I don't have to.

10 Q Did you tell-- Did somebody tell you not to tell
11 the Banks that you were going to clear the scene?

12 A I don't have to tell anybody I'm doing what.

13 Q Have you ever told me anything different than that?

14 A Excuse me?

15 Q Have you ever told me anything different than that?

16 A Not that I remember.

17 Q Did somebody at Cincinnati Insurance Company tell
18 you, "Don't tell the Banks, don't get their permission to
19 excavate"?

20 A No.

21 Q Okay.

22 A That's a standard-- Happens on every fire scene
23 I've ever worked.

24 Q Did you notify the Banks --

25 A I don't have to.

1 Q -- that you were going to excavate the scene?

2 A I don't have to.

3 Q Did you tell Cincinnati that the owners should be
4 notified before you excavate the scene?

5 A No. They don't have to be.

6 Q Wouldn't you want the Banks-- You're working for
7 the insurance company, right?

8 A Yes.

9 Q And if you're going to accuse them of arson,
10 wouldn't you want to let them see it before you pull it apart?

11 A Never have before.

12 Q And you've never said anything different?

13 A No.

14 Q Okay. Do you remember your deposition --

15 A Yes, sir.

16 Q -- back in January? Starting right here, up one,
17 right here, Line 12:

18 "QUESTION: Did you notify the Banks that you were
19 going to excavate the scene prior to doing so?"

20 And you answered, "No. I was instructed not to, not
21 to bother them."

22 Right?

23 A Right.

24 Q Who told you that?

25 A Stephen Pierce.

1 Q Works for Cincinnati?

2 A Yes.

3 Q He's in the special investigation unit?

4 A Yes, sir.

5 Q And I say, "All right --"

6 A But it wouldn't have mattered. I wouldn't have
7 notified them anyway.

8 Q "All right. Did you tell Cincinnati that the owners
9 should be notified before the scene was altered?"

10 And you said, "I did notify Cincinnati that we
11 needed to do that. I passed it on."

12 A Oh, I don't think that's what I said in the
13 deposition.

14 Q Well, you --

15 A Huh-uh. I have never reviewed this deposition. No,
16 sir.

17 Q You didn't say that?

18 A I would not have said that, no. No, I would not
19 have said that.

20 Q Your lawyers-- You had an opportunity to sign it.

21 A No. I've never seen it. I did not say-- I would
22 not have said that. No.

23 Q So when you --

24 A No.

25 Q This is a court reporter error, right?

1 A Yes. Yes. Absolutely.

2 Q Well, let's go on, see what else it says.

3 A Let's go.

4 Q "You don't know what came of that?"

5 And you say, "I don't know."

6 Then I asked you, "Do you agree that it's the
7 investigator's responsibility to preserve evidence as much as
8 possible and take care to avoid destruction of evidence, to
9 give all interested parties an opportunity to view the fire
10 scene in its original post-fire condition?"

11 And you answered, "Yes."

12 A Yes.

13 Q Didn't do that.

14 A But who was-- Yeah. Who was the interested
15 parties?

16 Q Larry Banks, Sue Banks.

17 A Who was their insurance company?

18 Q The people who have sued them for \$700,000.

19 A No, that's -- no, that's not the way this works.

20 Q How does it work?

21 A Interested parties is -- would be somebody that had
22 ownership of it. And that was -- that's who I was
23 representing, was the Banks through Cincinnati.

24 Q Tell me who you were representing again.

25 A The Banks through Cincinnati.

1 Q You were there on the Banks' behalf?

2 A They're insured through Cincinnati. That's who I
3 was there for. That was our client.

4 Q You were there for the benefit of the Banks?

5 A Yeah.

6 Q That's what you're telling the jury?

7 A That was our client, yes. That was our client.

8 Q And you told me that before, too, didn't you? Let's
9 read down here and see. I asked you-- Let's just go ahead
10 and read a little more. Talking about what your duties are,
11 "And in fact NFPA 921 provides in Section 11 that if
12 significant alteration of a fire scene is necessary, it should
13 only be done after notification to all interested parties,
14 which is what you suggested?"

15 And you answered, "Yes."

16 And then you said just what you're saying now, "I'd
17 also like to add no interested parties were identified,"
18 right?

19 A Right.

20 Q And I say, "Well --" and I say again now, "an owner
21 of a building would be an interested party." Do you agree
22 with that?

23 A Yes.

24 Q And then a question down, "I would assume that you
25 would want to notify him of what his rights may be."

1 And you answered, "I was there representing
2 Mr. Banks."

3 A Correct.

4 Q You realize you're standing in court accusing them
5 of arson -- accusing somebody of arson?

6 A I'm not accusing them of arson.

7 Q You don't have any idea if they burned their house
8 down?

9 A No.

10 Q You never accused them of it?

11 A I never accused anybody of it. I just said it was a
12 set -- it was an intentionally set fire. That's where my
13 focus ended. I've never pointed a finger at anybody.

14 Q Mr. Sells, you have no evidence of pouring anywhere
15 of ignitable liquid except for the two samples in the office?

16 A Correct.

17 Q There's no evidence of any ignitable liquid being
18 poured outside the office?

19 A Correct. There's not.

20 Q There is no evidence of any ignitable liquids in the
21 area of origin that you identified.

22 A Correct.

23 Q But it's because of these samples, these two samples
24 that Ms. Foran says were positive in the office here, that you
25 conclude that there was a trail of gasoline running through

1 the house and out the back door?

2 A That's exactly right.

3 Q And that's nothing more than your theory?

4 A That's my opinion, yes.

5 Q And your theory?

6 A My opinion, yes.

7 Q Mr. Sells, you -- you understand that your opinions
8 change people's lives?

9 A Absolutely.

10 MR. McWHERTER: No further questions.

11 THE COURT: Redirect?

12 MR. CHASTAIN: Yes, sir.

13 REDIRECT EXAMINATION

14 BY MR. CHASTAIN:

15 Q Mr. Sells, let me pick up where Mr. McWherter left
16 off and ask you some questions. When you went to the fire
17 scene, did you go there initially with the idea that it was an
18 intentionally set fire?

19 A No.

20 Q So were you going there to investigate the fire for
21 Cincinnati's insured?

22 A Yes.

23 Q And that was Mr. and Mrs. Banks?

24 A Yes.

25 Q At that point did you know what caused the fire?

1 A No.

2 Q What was your job then?

3 A To determine what did cause the fire.

4 Q And at that point did you have any reason, before
5 you go, before you start digging the first shovel, to think
6 they may be responsible?

7 A No.

8 Q Now, did Mr. Banks actually come by the house while
9 you-all were doing the debris removal?

10 A I -- we hadn't started it yet the first time he came
11 by.

12 Q Okay. What about a time when you were using the
13 back loader to pull stuff off? Do you remember him coming by?

14 A Not to my knowledge. I don't remember him coming.
15 I remember him coming to the scene twice.

16 Q Okay. Do you remember him coming by to get a lawn
17 mower?

18 A Yes.

19 Q Okay. Now, Mr. McWherter also asked you about the
20 ignitable liquids that you believe were in the area that was,
21 as you said in your report, totally destroyed. Do you
22 remember those questions?

23 A Can you clarify that, please?

24 Q The trailers that you say you believe were there --

25 A Yes. Yes.

1 Q What happens to ignitable liquids in fires?

2 A Oh, they can -- they can burn to a point where
3 they're not detectable by the -- by the lab equipment.

4 Q All right. So does the fact that there was no
5 ignitable liquid in the area between the saddle burns we saw
6 when you walked us through the video mean-- Let me rephrase
7 that. Does the fact that there was no positive sample for
8 ignitable liquids between the office and the area where we saw
9 the exiting saddle burns mean that they were not there?

10 A No. I believe that the saddle burns were the
11 furthestest point from where the ignitable liquids were
12 ignited, and by the time the fire department could get there,
13 put a stop on the fire, that's why those samples were
14 preserved.

15 Q Okay. Now, Mr. McWherter was asking you about
16 whether you could rule out accidental, negligent, and maybe
17 another one, in your hypotheses. Do you remember those
18 questions?

19 A Yes. I do.

20 Q All right. When you move, under the NFPA, from your
21 hypothesis to the testing stage, are you looking for the
22 probable answer?

23 A Yes.

24 Q All right. And let's look again at Section 18.6. I
25 think you may have been shown part of this, maybe all of it.

1 "Testing the Cause Hypothesis." It says, "Each of the
2 alternative hypotheses that were developed must be tested
3 using the scientific method." Did I read that correctly?

4 A Yes.

5 Q Did you do that?

6 A Yes, sir.

7 Q "If one remaining hypothesis is testing -- tested
8 using a scientific method and is determined to be probable,
9 then the cause of the fire is identified." Did I read that
10 correctly?

11 A That's correct, yes, sir.

12 Q And did you identify the cause of this fire?

13 A Yes, sir.

14 Q What was it?

15 A An incendiary fire, set fire.

16 Q What was it about the testing process here that
17 allowed you to say the probable cause was incendiary fire?

18 A It was the positive ignitable liquid samples and the
19 lack of contents.

20 Q Mr. McWherter asked you a question about normal
21 contents. Did you see the realtor photos?

22 A Yes, I did.

23 Q And did you base your evaluation on the normal
24 contents in this fire upon those pictures compared to what you
25 saw after the fire?

1 A Yes.

2 Q Now, Mr. McWherter also asked you a question about
3 the trailers, that last series of questions that he was asking
4 you. Do you recall those?

5 A Yes.

6 Q If there was not a trailer into the office area
7 where you guys have talked about, what does that mean to you
8 about the fire in the office area?

9 A My opinion is, there was trailers. If there was
10 not, then that would mean there would be multiple fires set
11 throughout the house.

12 Q And are multiple fires something else that in your
13 mind are indicative of an incendiary fire?

14 A Yes. They definitely are. It's just separate,
15 unconnecting fires.

16 Q And in fact-- Let me show you Section 22.2.1.

17 A Yes, sir.

18 Q "Multiple fires are two or more separate,
19 nonrelated, simultaneously burning fires." Did I read that
20 correctly?

21 A Yes, sir.

22 Q Now, if there were no trailers-- And your opinion
23 is, there were trailers. Is that correct?

24 A Yes, sir.

25 Q All right. And did you see physical evidence that

1 leads you to -- or supports that contention in the video that
2 we looked through?

3 A Yes. I see the-- Our patterns -- our saddle burns
4 in the floor is in line with going out the back door. My
5 theory of it being poured out the rear door of the house and
6 down the steps was in the video where we would see the smaller
7 saddle burns coming down the steps.

8 Q All right. But if that's not accurate and there
9 were multiple fires, as NFPA says that you could look at, what
10 is your opinion of the fire?

11 A It was still incendiary.

12 Q I want to clarify some things on your report.
13 Mr. McWherter quoted some of them. I want to look at your
14 report and -- just to confirm what you told Cincinnati. Did
15 you send this report to Cincinnati?

16 A EFI did. I didn't personally send it.

17 Q Okay. Now, Mr. McWherter read from sections down
18 here. And I believe he read this paragraph that starts with
19 "Physical evidence." Is that correct?

20 A I believe so.

21 Q All right. Let's look back up on that page. And
22 did you tell Cincinnati at the time of your first report, "The
23 contents remains were not consistent with the occupancy.
24 Evidence indicated some of the contents had been removed prior
25 to the time of loss"?

1 A Yes.

2 Q Was that your opinion then?

3 A Yes.

4 Q Is it today?

5 A Yes.

6 Q Has that changed?

7 A No.

8 Q Now, Mr. McWherter asked you about the fuel load.

9 Do you recall those questions?

10 A Yes, sir.

11 Q And he was talking about rooms in general, correct?

12 A Yes.

13 Q Let's look at your comments about the office in
14 particular. This is on Page 5 of your report. The first room
15 in this area, starting right here --

16 A Okay.

17 Q -- was the office. (Indicating.) "The flooring in
18 the office was damaged. The exposed subfloor was generally
19 damaged. A prominent saddle burn was noted near the center of
20 the floor in the office." Have I read that correctly so far?

21 A Yes.

22 Q All right. Read the next two sentences for us,
23 please.

24 A "The saddle burn was not normal for this area. No
25 fuel load was present in this area that could have been

1 responsible for the floor level burning."

2 Q All right. So when you talk specifically about the
3 fuel load in the area where you found the samples that turned
4 out to be positive, was there sufficient fuel load to have
5 caused these saddle burns if it was not an ignitable liquid?

6 A No, sir.

7 Q Did you, in terms of your data collection-- And
8 Mr. McWherter asked you about the grounding of the meter base.
9 Do you remember that question?

10 A Yes.

11 Q Why would that be important?

12 A I have no idea.

13 Q Okay. In this fire was there any evidence of a
14 lightning strike?

15 A No.

16 Q Is that something you looked at, too?

17 A I interviewed the neighbors, the fire department.
18 Like I say, the fire department was less than a half a mile
19 away from the home. Nobody reported any kind of thunder,
20 lightning, rain, anything like that.

21 Q Okay. You were asked some questions about that shoe
22 tree that we have the photograph of and where exactly it was
23 located.

24 A Yes, sir.

25 Q All right. And my question to you is a little bit

1 different. And I know we looked at this, not on the monitor,
2 because the pictures were not good, but was the portion of the
3 shoe tree still there when you got to the scene?

4 A Yes.

5 Q Okay. So you could look and see it?

6 A Yes.

7 Q All right. I think we covered that before. Let me
8 show you part of the realtor dwelling photos.

9 (Off-the-record discussion.)

10 BY MR. CHASTAIN:

11 Q Part of 247. And this is the office picture we've
12 seen. Is this the printer you were talking about?

13 A I believe so, yes.

14 Q Is it sitting on a -- some type of surface?

15 A Yes.

16 Q What's it sitting on?

17 A I can't tell in this picture if there's something
18 there or if that's that -- the L off the desk.

19 Q Okay. If there was another electrical panel where
20 Mr. McWherter has told you that Mr. Banks may say it is, does
21 that explain the positive ignitable liquid sample?

22 A No, sir.

23 Q Does the shape of the saddle burn or maybe the size
24 and shape of the saddle burning that you saw in the office
25 area tell you anything about whether or not the desk or the

1 secretary, if they were in there, could have been the cause of
2 the saddle burns?

3 A It does.

4 Q What does it tell you?

5 A The saddle burn in this floor is too small. We're
6 looking at a huge desk. If the desk would have caused the
7 burn, there would have been a bigger hole in the floor. But
8 we're talking just a -- just a small hole in the floor and
9 then the sharp, small, short saddle burn.

10 (Off-the-record discussion.)

11 BY MR. CHASTAIN:

12 Q Mr. Sells, let me show you what was marked as
13 Exhibit 386. Do you remember looking at this picture?

14 A I do, yes, sir.

15 Q All right. And you started to mention something to
16 Mr. McWherter about some burning -- burn patterns over in this
17 area. Do you recall that?

18 A I mentioned the studs where there were still remains
19 of 2-by-4 studs in that area.

20 Q All right. Did you mention anything about the
21 direction that the burn appeared to be occurring?

22 A I did, yes, sir.

23 Q Would you explain what you were trying to say to the
24 jury?

25 A As -- as fire encroaches, especially on wooden

1 studs, it's going to do what they call "material loss," and
2 it's going to form a V. So this would be half of it.
3 (Indicating.) All right? Well, my pointer won't draw. Half
4 of a V, that's indicating the fire is traveling from here this
5 way. (Indicating.) The fire was attacked by the fire
6 department from here, this way. (Indicating.) So that
7 stopped the fire, allowed more material to still be in place,
8 causing this pattern. (Indicating.) Does that make sense?

9 Q That did to me.

10 A Okay.

11 Q Let me show you what was marked as Exhibit 444. Do
12 you remember seeing this photograph?

13 A Yes, sir.

14 Q All right. Now, if we look in this area, what is
15 under the debris? (Indicating.)

16 A Dirt.

17 Q Okay. How far up does the dirt come?

18 A Just right up to the edge of the block.

19 Q Okay. So is this the area you were talking about
20 that you did not dig out?

21 A Yes.

22 Q Okay. Did you see the washer and dryer at the fire
23 scene?

24 A I did.

25 Q Mr. McWherter asked you if a variety of things could

1 cause saddle burns. Do you remember that question?

2 A Yes.

3 Q And in order to determine whether the saddle burning
4 came from any of those things that he mentioned—and we'll put
5 the section up there that I think he quoted—radiant heating,
6 or from a burning material in close proximity to the floor, or
7 whatever, is that why you took the sample?

8 A Yes, sir.

9 Q Okay. And if there is simply radiant heating from
10 something that is not an ignitable liquid, will it come back
11 as a positive ignitable liquid sample?

12 A No.

13 Q Now, I think you made this pretty clear, but you
14 don't run the test. Is that correct?

15 A No, sir, I do not.

16 Q But you as a fire investigator rely upon the chemist
17 to tell you what these things are?

18 A Yes, sir.

19 Q And do you rely on the chemist to differentiate
20 between things like other hydrocarbons and ignitable liquids?

21 A Yes.

22 Q All right. Let's talk some more about saddle burns.

23 A All right.

24 Q And I think that Mr. McWherter got into this issue,
25 also, when he was talking about flashover. First of all, do

1 you believe that flashover occurred in the office?

2 A I do not.

3 Q And before we get into that, does flashover require
4 the entire room to be heated to the ignition point of
5 everything in the room?

6 A Correct. Yes, it does.

7 Q What happens when that roof caves in? Is it
8 possible --

9 A It ventilates, and would possibly cool the room
10 down.

11 Q And you told Mr. McWherter that the fire did travel
12 into the ceiling. Is that correct?

13 A Yes.

14 Q Once that ceiling fell in, is it even remotely
15 possible there was a flashover?

16 A No.

17 Q Now, let's look at the section I think you-all
18 looked at, "Flashover and Full Room Involvement." And I want
19 to look at the sentence that starts "When the fire has
20 progressed," right here. (Indicating.) You see where I'm at?

21 A Yes, sir.

22 Q It says, "When the fire has progressed to full room
23 involvement, the area pattern may be uneven and may extend to
24 the floor." Did I read that correctly?

25 A Yes, sir.

1 Q And in this case did the burn pattern extend under
2 the floor?

3 A No.

4 Q What about the joists?

5 A It did penetrate the floor and give us a saddle burn
6 on it, on --

7 Q And if there had been a flashover in that room, what
8 would have happened to all the exposed flooring we saw?

9 A It would have all been evenly charred.

10 Q And was it?

11 A No.

12 Q This may be a minor point. Mr. McWherter asked you
13 a question about whether irregular patterns were "all over the
14 place," was the wording that I wrote down.

15 A Yes.

16 Q And "long extinguishing times." Do you remember
17 that question?

18 A Yes, I do.

19 Q All right. Is that true?

20 A No.

21 Q Okay. Let's look at Section -- and see what NFPA
22 says about this. Section 6.3.7.8.2 says, "Irregular patterns
23 are" what?

24 A "Common."

25 Q "-- in situations of post-flashover conditions,"

1 again, "long extinguishing times or building collapse."

2 Again, did you find irregular patterns that were common
3 throughout this house?

4 A No.

5 MR. McWHERTER: Objection. Asked and answered.

6 THE COURT: I'll overrule it. It's already out.

7 Just proceed.

8 BY MR. CHASTAIN:

9 Q Mr. McWherter asked you some other questions about
10 testing the hypothesis and how you got to your final opinion.
11 And that is your opinion in this case?

12 A Yes, sir, it is.

13 Q Let's look at Section 18.7, which talks about
14 selecting the final hypothesis. Let's read. "Once your
15 hypotheses regarding the cause of the fire have been tested,
16 the investigator should review the entire process to ensure
17 that all credible data are accounted for and all credible
18 alternative cause hypotheses have been considered and
19 eliminated. When using the scientific method, the failure to
20 consider alternative -- alternate hypotheses is a serious
21 error." Correct? Have I read that correctly?

22 A Yes, sir, that's correct.

23 Q All right. "A critical question to be answered by
24 the fire investigator is, are there any other cause hypotheses
25 that are consistent with the data." Did I read that

1 correctly?

2 A That's correct.

3 Q All right. Now, what is the only cause hypothesis
4 that is consistent with the data you observed in this house?

5 A The only cause that would withstand the testing and
6 the final hypothesis was an incendiary, set fire.

7 Q All right. Mr. McWherter asked you whether you
8 taught any seminars. Do you remember that?

9 A Yes, sir.

10 Q Did you mention during my direct that you taught
11 something up in Knoxville?

12 A I taught at the National Forensic Academy, yes, sir.

13 Q Okay. And that's not a seminar, is it?

14 A No.

15 Q Is it a class, though?

16 A Yes. It's a six-month-long class. People from all
17 over the state, law enforcement, fire departments, come and
18 take part in that.

19 Q Mr. McWherter asked you about being let go from EFI.
20 Why were you let go?

21 A Well, what they -- the reason they gave me was that
22 there wasn't enough work to support my position. They gave me
23 four months' severance pay and cut me loose.

24 Q Is that what you used to start your own business at
25 that point?

1 A Exactly. Yes.

2 Q And, finally, you've been asked questions about
3 talking to witnesses. On every fire scene investigation that
4 you do, have you -- do you ever always talk to the insured?

5 A When possible. Oh, the insured. I'm sorry.

6 Q The insured, yes.

7 A When it's possible, yes. There has been times I've
8 been instructed not to besides this case, yes.

9 MR. CHASTAIN: Okay. Thank you, Your Honor. That's
10 all I have.

11 THE COURT: All right. You may step down.

12 THE WITNESS: Thank you, sir.

13 (Witness excused.)

14 MR. CHASTAIN: And, Your Honor, we may need him next
15 week. So...

16 THE COURT: All right. You're not completely
17 excused, then. Looks like you're on tap.

18 THE WITNESS: Okay.

19 MR. CHASTAIN: Which means you can't stay in here,
20 though.

21 THE WITNESS: You don't have to twist my arm.

22 THE COURT: All right. Your next witness?

23 MR. FERRELL: Your Honor, Cincinnati calls
24 Ms. Christine Foran.

25 (Brief pause.)

1 CHRISTINE FORAN,
2 called as a witness at the instance of the plaintiff, having
3 been first duly sworn, was examined, and testified as
4 follows:

5 DIRECT EXAMINATION

6 BY MR. FERRELL:

7 Q Ms. Foran, would you state your name for the record,
8 please?

9 A Christine Foran.

10 Q Okay. And, Ms. Foran, are you-- Tell me what your
11 role is in this case that we're here talking about today.
12 What do you do for a living?

13 A I'm employed by EFI Global. I do forensic chemistry
14 for them. And I conducted chemical testing on fire debris
15 samples for this case.

16 Q Okay. Before we move into the specifics of your
17 work in this case, I want to talk about your education,
18 training, and your experience.

19 A Sure.

20 Q Let's start with your education. What degrees, if
21 any, do you hold?

22 A I hold a bachelor of science degree in chemistry
23 from the University of Illinois.

24 Q And when did you receive that?

25 A 1985.

1 Q Okay. After you received that degree, did you go to
2 work somewhere, or what did you do?

3 A I did. I became employed by Upjohn Pharmaceuticals
4 in their analytical chemistry lab, and I did testing using gas
5 chromatography and HPLC, high-performance liquid
6 chromatography.

7 Q High-performance liquid chromatography?

8 A Chromatography, yes.

9 Q Okay. And -- well, briefly, what is gas
10 chromatography?

11 A Gas chromatography is an analytical method that is
12 used to do quantitative or qualitative analysis of specific
13 analytes or components of interest.

14 Q Okay. And, also briefly, what is high-performance
15 liquid chromatography?

16 A It's another analytical test method. It's another
17 chromatographic method that's used to do quantitative or
18 qualitative analysis of analytes.

19 Q Of analytes?

20 A The components of interest.

21 Q Okay. And how long did you work at Upjohn
22 Pharmaceuticals?

23 A I worked in the analytical chemistry department for
24 approximately two years, and then I transferred to a quality
25 assurance/R & D department and worked with Dr. Kiususuji on

1 development of test methods that are used for on-line or
2 near-line assessment of components in pharmaceutical products.

3 Q Okay. And what were the years, generally, that you
4 worked there?

5 A Oh, I worked there about five years.

6 Q And what year did you start there? Let me say that.

7 A 1986, January.

8 Q Okay. And when did you stop working there?

9 A I believe I quit working there in about 1990.

10 Q Well, why did you stop working there?

11 A Oh, I decided to become a stay-at-home mom.

12 Q Okay. And so you did that for how long?

13 A I was a stay-at-home mom for ten years.

14 Q Okay. And did you go back to work after a while?

15 A I did. I returned to my profession in 1999. I
16 began working at EFI Global.

17 Q Okay. And what -- I think you told us, but, again,
18 what do you do for EFI Global?

19 A I work as a forensic chemist for them, but I use the
20 same analytical test methods or similar analytical test
21 methods that -- or tools that I used at Upjohn
22 Pharmaceuticals, and so I began using those in forensic
23 applications at EFI Global.

24 Q Okay. What do you analyze, I guess --

25 A I --

1 Q -- for EFI Global?

2 A At EFI Global my two primary focuses are analysis of
3 ignitable liquid residues in fire debris samples --

4 Q Okay.

5 A -- and then the other primary test method I do is
6 analysis of liquefied petroleum gases and natural gas for
7 mercaptans, odorants, and hydrocarbon composition.

8 Q Which of those two have anything to do with what
9 we're talking about today?

10 A The analysis of ignitable liquids.

11 Q And what is an ignitable liquid?

12 A Ignitable liquid is a liquid that has a flash point
13 typically that's between a sub-ambient temperature and about
14 260 degrees Fahrenheit.

15 Q What's a sub-ambient --

16 A Below ambient temp- -- below room temperature.

17 Q That's --

18 A Gasoline has a sub-ambient flash point.

19 Q Okay. In your role at EFI Global, how many fire
20 debris samples would you analyze in a given week, on average?

21 A It can vary. Twenty to thirty. I think it averages
22 about 1200 to 1500 a year.

23 Q Has it been about that since you started at EFI
24 Global?

25 A Yes.

1 Q And what year, again, did you start at EFI Global?

2 A 1999.

3 Q Okay. Are you a member of any organizations that
4 are related to what you do in your work?

5 A I have memberships with the International
6 Association for Arson Investigators and for the American
7 Chemical Society.

8 Q Okay.

9 A I find the subscriptions that are provided by both
10 of those organizations to be useful.

11 Q Okay. What specific training in fire debris
12 analysis have you had?

13 A Once I began working at EFI Global, I took the
14 analytical test methods that I had used at EFI and also had
15 been trained at -- on at University of Illinois and applied
16 those in a forensic matter using -- for ignitable liquid
17 residues. So basically I began doing gas chromatography with
18 mass spectroscopy in the assessment of ignitable liquids in
19 fire debris samples.

20 Q Okay. Have you been accepted by other courts as an
21 expert in the area of fire debris analysis?

22 A Yes. I've testified in state and district or
23 federal courts, in both criminal and civil litigation, and
24 have been accepted by both.

25 Q Have you provided testimony in this building?

1 A Yes, I have, actually. I've been here in this -- in
2 this building before.

3 Q Okay. Have you ever been rejected by any court as
4 an expert in fire debris analysis?

5 A No.

6 Q Okay. Ms. Foran, I'd like to show you what's been
7 marked as Exhibit 145. And if you look on your screen, I --
8 hopefully this will show up where you can see it. And this is
9 your curriculum vi- -- vi- -- it's your CV. How about that?
10 Is this your current CV?

11 A It looks like it, yes.

12 Q Or recent, anyways?

13 A Yes.

14 Q Okay. And does it list your -- some of your
15 professional summary and experiences and your qualifications
16 there?

17 A Yes, it lists a brief summary, a concise summary, of
18 my work.

19 Q Does it also list your education there and your
20 affiliations as well?

21 A Yes.

22 Q Okay. Thank you. All right. Let's jump ahead a
23 little bit and ask you generally if there were any industry
24 standards that you relate and you use in your fire debris
25 testing in general and in this case?

1 A Yes. In our laboratories we strictly apply two --
2 well, two or more ASTM standards. ASTM is an organization --
3 standard organization that publishes accepted test methods for
4 what we do, the analysis of ignitable liquids. And those are
5 strictly adhered to in our laboratory.

6 Q Would those include ASTM 1412 and ASTM 1618?

7 A Yes.

8 Q Okay. We'll talk about that a little bit later in
9 more detail, but-- Just one moment. Okay. And are you
10 familiar with those standards?

11 A Yes, very familiar.

12 Q Do you use them every day? In your testing do you
13 rely upon those?

14 A Except on weekends, pretty much.

15 Q Okay. Except after maybe an hour from now, right, I
16 guess?

17 A Right.

18 Q Okay. How did you become involved in this
19 particular case?

20 A I believe I received samples through FedEx or some
21 other shipping carrier through -- from Mr. Mark Sells. He's
22 an EFI -- or he was an EFI fire investigator. He did cause
23 and origin investigation, collected debris samples from a
24 specific location, and sent those to me, and then he requested
25 that I test those for ignitable liquids.

1 Q Okay. Were you in any way associated with the
2 investigation of the fire scene itself?

3 A No.

4 Q Okay. As a forensic chemist, I think is what you
5 said earlier, for EFI, who do you do your work for?

6 A I do my work for-- I act pretty independently. I
7 don't patronize a specific type of clientele. So I do work
8 for insurance companies, I do work for police and fire
9 departments, for private individuals, attorneys, whoever
10 decides to employ me. If I have the capability of doing the
11 testing -- I don't do work outside my scope of work, but if I
12 have the capability, I will do that type of testing.

13 Q All right. Let's talk about the debris samples that
14 you received in this case. How did you -- I think you
15 mentioned that you did receive them from Mark Sells?

16 A Yes.

17 Q And how did they come to you?

18 A I believe they came shipped via FedEx.

19 Q What are the debris samples themselves contained in?

20 A The debris samples were collected in 1-gallon
21 evidence cans. They are new, unused containers, and they--
22 Mr. Sells collected the evidence, he placed them in nine
23 individual containers, labeling them with the project number,
24 the date of collection, and other pertinent information
25 related to the specific item.

1 Q Okay. Let me show you what's been marked as
2 Exhibit 146. This may not show up very well, but we'll -- can
3 you see that well enough to see what it is?

4 A Yes. It looks like the evidence label that was on
5 Sample 1 from the evidence collected for Project 94216-16545.
6 The file name was Banks.

7 Q Okay. I'll show you next what's been marked as
8 Exhibit 147. Can you make that out?

9 A Yes, sir.

10 Q Okay. What are we looking at here?

11 A These are the contents of Debris Sample 1 from that
12 specific project. They were the contents removed from the
13 evidence container. And I photographed it and then returned
14 the evidence to the container.

15 Q What was contained in the container, what type of
16 materials?

17 A Charred wood and wood flooring, primarily, little
18 bits of ash.

19 Q Do you know where Sample 1 came from, the location?

20 A I believe it's listed on the can in the evidence
21 transmittal. I want to say it was labeled as a bedroom.

22 Q Okay. Next I want to show you what's been marked as
23 Exhibit 148. Can you tell me what we're looking at there?

24 A That's the evidence, Item Number 3, from the EFI
25 File Number 94216-16545, and the -- it's labeled as "flooring

1 collected from B1," which I believe is "Bedroom 1."

2 Q Okay. Thank you.

3 A Uh-huh.

4 Q Next show you what's been marked as Exhibit 149.
5 What are we looking at there?

6 A That is the contents of Sample Number 3 of the fire
7 debris samples, and it included charred wood, ash, and wood
8 flooring and other debris.

9 Q Is the materials in this container similar to the
10 ones we looked at -- or that you looked at in Sample 1?

11 A Yes. Both contained wood flooring samples, yes.

12 Q Okay. Do you know where Sample 3 came from?

13 A I believe it was from Bedroom 1. That's --

14 Q Do you know whether that's the same area we talked
15 about where Sample 1 came from?

16 A To my understanding, it was the same vicinity, yes.

17 Q Ms. Foran, do you know whether any other samples
18 that you tested were also obtained from this area?

19 A There was one other sample, Sample 2.

20 Q Okay.

21 A Samples 1, 2, and 3, I believe, were collected from
22 the bedroom labeled Bedroom 1.

23 Q Same room. Wherever they were collected is the same
24 room. Is that your understanding?

25 A Same, uh-huh.

1 Q How many samples did you test in all?

2 A Nine.

3 Q Okay. The other samples came -- do you know whether
4 they came from other areas of the home?

5 A Yes, they did come from other areas.

6 Q Okay. Did you receive chain of custody documents
7 along with the samples that you received?

8 A Yes, I did.

9 Q Okay. And what does that establish for you?

10 A That establishes a chain of possession from the
11 point at which the samples are collected until I receive them
12 in the laboratory. So as transfers of possession occur, it
13 documents who had possession of the items, and then it also
14 describes a list of the evidence, the type of analysis
15 requested, an EFI file number, and who the report would go to.

16 Q And does it give you -- does it instruct you where
17 these items came from?

18 A Yes.

19 Q Okay. And do you mark these samples in some way?

20 A Yes. When they're received in the laboratory, we
21 follow ASTM protocols on handling the evidence. And they're
22 also described in Chapter 16 of 921. So each item is assigned
23 a unique identifier and EFI log number upon its receipt.

24 Q So sample whatever, 4, might -- has its own number,
25 in other words?

1 A Yes.

2 Q What is passive headspace concentration?

3 A That's the initial method that is used as part of
4 the analytical testing performed on the fire debris samples.
5 It's ASTM 1412, and it -- it will basically concentrate the
6 ignitable liquid residues, if they are present in samples, on
7 a charcoal absorbent strip that's placed inside the evidence
8 can. It allows us to extract the ignitable liquid vapors from
9 the debris and concentrate them in a way that we can go on
10 with the analysis and identification.

11 Q Okay. And did you perform that particular headspace
12 concentration with respect to the samples that you tested?

13 A Yes.

14 Q Okay. I want to show you what's been marked as
15 Exhibit 151. Is this the standard we were talking about?

16 A Yes, sir, it is. It's the ASTM standard that is
17 strictly followed in our laboratory.

18 Q Okay. And is this the standard where you --
19 concerning the passive headspace concentration process that
20 you described for us?

21 A Yes, it is. This method is really suitable-- When
22 we receive the fire debris samples, it is a mixture of debris;
23 we cannot make a determination as to whether an ignitable
24 liquid might be present in the sample. And this method is a
25 non-- one of the more non-destructive methods of removing the

1 ignitable liquid residues if they are present in the debris
2 and extracting them to a charcoal absorbent that's placed in
3 the can, and then that absorbent is then desorbed with a
4 solvent to get this in a form that we can do further
5 analytical testing.

6 Q Okay. Thank you.

7 A Uh-huh. Sure.

8 Q And I may have asked you a question similar to this,
9 if not the same question, but was your passive headspace
10 concentration collection method performed in accordance with
11 ASTM 1412?

12 A Yes, sir.

13 Q All right. Once you get -- once you go through the
14 process that you just described, what needs to be done to
15 that?

16 A Well, once the debris samples have been extracted,
17 we have a 1-milliliter extract that is collected from each
18 sample, and it's stored in a vial. And that vial, that
19 extract, is then analyzed with another ASTM method called ASTM
20 1618, or that's the number of it, and this will help us to
21 characterize and identify whether any ignitable liquids are
22 present in that extract.

23 Q Is that extract -- do you use all that in your
24 analysis?

25 A No. We use 1 microliter out of the 1 milliliter.

1 So one one-thousandth of the extract is actually used. One
2 milliliter is the total amount.

3 Q Is the extract that you prepared still available to
4 be tested today?

5 A Yes. That's a requirement as part of the ASTM
6 methodology, that we retain the extracts.

7 Q At any point in time since you were involved in this
8 case, were you requested by anyone else to provide the extract
9 for testing?

10 A No.

11 Q Did the insureds ask you for the extract for
12 testing?

13 A No.

14 Q Did their lawyers ask you for that, to your
15 knowledge?

16 A No, not to my knowledge.

17 Q Any experts ask you to test the extract?

18 A No.

19 Q All right. Let's go back to the tests you
20 performed. You have the extract material. Would you explain
21 to the ladies and gentlemen of the jury and to the Court what
22 happens next?

23 A Sure.

24 Q Okay.

25 A The extract is analyzed using gas chromatography and

1 mass spectroscopy.

2 Q Now, is that a machine or something that you use?

3 A It is. It's an instrument --

4 Q Okay.

5 A -- provided by Varian, and it's -- has a specific
6 configuration and instructions for use that are described in
7 ASTM 1618.

8 Q Okay.

9 A It's designed for separation of analytes,
10 separation -- clear separation and identification of the
11 analytes that we are interested in.

12 Q You've explained this to me where even I could
13 understand it.

14 A Sure.

15 Q And I just wonder if you might could explain or show
16 the jury somehow how it works. I don't know if you might
17 could use your screen maybe to explain how this works to us.

18 A Sure. I can try.

19 Q Okay.

20 A The mixture that we extract from the debris sample
21 contains not only the solvent that we use to extract it but
22 whatever components were volatile in the debris sample and
23 were extracted during the heating process and ASTM4 1412. So
24 we basically have a mixture and we need to separate the
25 mixture into very nice, evenly, you know, separated groups so

1 that we can use that to compare that to known reference
2 standards. So if you can picture, like, the chromatographic
3 process is -- the column we use is 30 meters long, and when
4 the mixture is injected at the beginning of the column,
5 it's -- it has to travel 30 meters before it gets to the
6 detector. And so if you can picture, like, the starting point
7 on a horse race, and all the horses are grouped in a pack.
8 I'm talking about horses. In reality, what we were looking at
9 was chemicals, you know, molecules.

10 Q Sure.

11 A So that -- the horse race begins, the gate opens,
12 and the pack begins to travel around the -- around the track.
13 As the traveling begins, the lighter components go very
14 quickly through the track, and they collect according to their
15 molecular weight, their size and similar characteristics, and
16 that pack will travel together around the gas chromatographic
17 column. The heavier components travel a little bit more
18 slowly. And then we may have some medium weight components
19 that will travel somewhere in the middle. But eventually, you
20 know, the pack travels around the track and gets to the finish
21 line, it crosses the finish line, and at that point you can
22 picture, like, a photo finish where we take a picture of all
23 the things coming across the finish line. That's when the
24 mixture has traveled through the gas chromatograph and is
25 reaching the mass spectrometer. The mass spectrometer

1 basically characterizes all those things crossing the finish
2 line. And so even if they're similar molecules, they may have
3 a similar molecular weight, but they may actually be different
4 in structure, crossing the finish line at the same time. The
5 mass spectrometer takes a photograph of it, and we can
6 actually separate out different characteristics of the
7 molecules crossing the finish line at the same time.

8 Q And is that done so that you can analyze whatever
9 comes out of that process?

10 A Yes. The data collection begins once the injection
11 is made into the gas chromatograph, and continues until a
12 point where we believe all the components of interest would
13 have eluted, would have crossed the finish line.

14 Q Okay. When you perform your analysis after -- you
15 know, through this process, what standard are you using?

16 A ASTM 1618.

17 Q Okay. I want to show you what's been marked as
18 Exhibit 152. Let me get rid of this. What are we looking at
19 here?

20 A This is the published ASTM standard, the -- for
21 ignitable liquid residues and extracts from fire debris
22 samples by gas chromatography/mass spectroscopy. This is an
23 industry-wide accepted test method for the analysis of
24 ignitable liquids in fire debris. And any reputable
25 laboratory follows this method in doing that testing.

1 Q Okay.

2 THE COURT: What's that exhibit number?

3 MR. FERRELL: One-- Excuse me. If I can talk. 152.

4 THE COURT: Thank you.

5 MR. FERRELL: Yes, Your Honor.

6 BY MR. FERRELL:

7 Q Let's jump down to Number 3. The 3.1 there, what --
8 does that basically -- tell me whether or not that just
9 describes what you talked about before.

10 A It does. The data that's collected during the
11 analysis is stored, and then can be viewed as chromatograms,
12 yes.

13 Q Okay. Let's go down to 3.2.1. And tell us what
14 this means. I guess you could just read it.

15 A Could you move the document up just a little bit?

16 Q Absolutely.

17 A I can't quite see that.

18 Q (Complying.)

19 A Okay. 3.2.1 talks about the different tools that
20 are used for characterizing all those things crossing the
21 finish line, the components crossing the finish line. It
22 tells you specifically what types of components are -- we'll
23 be interested in looking at, and then it tells you three tools
24 that are used for characterizing that—the total ion
25 chromatogram, which would be a picture of everything crossing

1 the finish line; the extracted ion profiles, which would be,
2 for instance, if I instruct the instrument to only look at
3 components of a certain size or shape; and then the TCCs,
4 the -- which is the target compounds of interest. And so we
5 know specifically what type of compounds are going to be
6 present in ignitable liquids, and I can instruct the
7 instrument to look for those.

8 Q And do you evaluate those against anything
9 particular?

10 A Yes, absolutely. These components are verified
11 against known referenced ignitable liquids. I run a vast
12 library of ignitable liquids in various degrees of weathering
13 and evap- -- weather, you know, they are evaporated at
14 different levels. And I prepare those in the laboratory.
15 They're known standards, you know, known materials, and then I
16 run them on the same instrument that I'm actually doing the
17 unknown samples.

18 Q Do you compare what you obtain from the fire scene
19 in the sample cans and run through this test like you told and
20 then do this analysis?

21 A Yes.

22 Q Is that what you've telling us?

23 A The process is typically that we look at the total
24 ion chromatogram at first; we do extracted ion profiling, look
25 for specific types of compounds, and then we compare that to

1 known reference ignitable liquids, and then look for specific
2 compounds that are going to be present in different
3 classifications of ignitable liquids.

4 Q Okay. Let's turn to the next page here. 4.2,
5 looking at -- can you see that?

6 A Yes.

7 Q The second sentence here, basically what are we --
8 you can take a look at that. What is the importance of that
9 particular standard?

10 A Oh, the importance -- the reason that this standard
11 and the previous standard are so useful is that we can
12 identify ignitable liquids even in the presence of interfering
13 products, because the debris sample doesn't just contain
14 ignitable liquids, it contains components contributed by the
15 matrix of the sample. For instance, if you have carpeting or
16 flooring samples or wood, plastics, all of those things are
17 going to contribute components as well. We can also have
18 components contributed by pyrolysis or by combustion. And so
19 this procedure has been tailor-made so that we can still
20 extract ignitable liquids even in the presence of all of these
21 potentially interfering components.

22 Q Okay. Thank you. Section 5 talks about the
23 apparatus, the equipment. Does EFI's equipment comply with
24 Section 5 of this ASTM standard?

25 A Yes, our equipment is in compliance.

1 Q Okay. And did you tell me that your equipment
2 maintains reference of ignitable liquids, a library of
3 ignitable liquids?

4 A Yes. Just like the fire debris sample data is
5 stored electronically, the ignitable data and data regarding
6 the matrix of samples, pyrolysis products, combustion
7 products, we run all of these types of samples on the same
8 instrumentation. And so when we do our comparisons of the
9 unknown, we have data that's actually been run on the same
10 instrument to compare it to.

11 Q Okay. Thank you. I'll try to move this along a
12 little bit if I can. Let's go over to Section 9. We touched
13 on this, but look at 9.1, and read that for me, please.

14 A "Initial data analysis consists of a visual
15 comparison of the total ion chromatograms to the referenced
16 ignitable liquid chromatograms as described below."

17 Q Look at 9.1.1. It describes the essential
18 requirement for making the classifications. Look at that for
19 me.

20 A Sure. "The essential requirement for making the
21 classification using this procedure is matching of the sample
22 chromatogram with a referenced ignitable liquid chromatogram
23 obtained under similar conditions, noting points of
24 correlation and similarities. Make all comparisons using
25 adequate chromatograms as described in 8.7, the interpretation

1 criteria described in Section 11." And I do that on every
2 fire debris sample.

3 Q Okay. 9.1.2 talks about external libraries. What
4 does that mean?

5 A External libraries are available. For instance, I
6 can pull up, online or through textbooks, other literature,
7 chromatograms, and spectral data on ignitable liquids or any
8 chemical compound. But for the purposes of analysis of
9 ignitable liquids, this ASTM method says that those libraries
10 are only supposed to be used for guidance, that actual
11 referenced ignitable liquids need to be run on the same
12 instrument that you're doing the unknown samples.

13 Q And you -- do you do that?

14 A Yes.

15 Q Thank you. Okay. Let's look at 9.2.1. And let's
16 see -- start at "Individual" and read that for me and tell me
17 what that means.

18 A "Individual extracted ion profiles for two or more
19 characteristic ions of the same functional group or of similar
20 magnitude can be summed to enhance signal-to-noise ratio and
21 to decrease interferences by extraneous compounds that contain
22 only one of the ions or to create summed profiles
23 characteristic of specific classes of hydrocarbons."

24 Q What does that mean?

25 A That's a mouthful. Meaning that we know

1 specifically what classes of compounds we're looking for
2 typically in ignitable liquid residues. And when I analyze a
3 sample, I initially will print out a summary of the
4 chromatograms or compounds, classes of interest that we
5 routinely look at, and I will do that by asking the program to
6 sum the ions, the pieces, that I am interested in, and so when
7 I print that out, it'll be a summed profile of compounds or
8 compound classes.

9 Q Just help you in separating the hydrocarbons from
10 the ignitable liquids?

11 A Yes, it does.

12 Q Okay.

13 A I mean, the hydrocarbons are ignitable liquids --

14 Q Well, other products.

15 A -- but it helps me separate the ignitable liquids
16 from compounds that I'm not interested in.

17 Q Got you. Okay. And let's look at 9.2.3 where it
18 says "The final identification."

19 A "The final identification shall be made by an
20 analyst on the basis of mass spectra and relative retention
21 times of the components in question by comparison to
22 referenced ignitable liquids." Presently, I mean, there's
23 even been publications recently on computer models to do
24 ignitable liquid analysis. Those have, you know, some rate of
25 error that is unacceptable at this point, and so in -- if you

1 do use a computer model for the pattern recognition, it's
2 instructing you that you still are required to do a visual
3 analysis of the data in order to report a result.

4 Q And did you do that in this case?

5 A Yes.

6 Q Okay. I'll try to quickly go to 9.3.2.2, target
7 compound chromatograms. What's the importance of that?

8 A That's one of the three tools -- three tools we use
9 in assessing whether an ignitable liquid is present. If we do
10 have an extracted ion profile that indicates there may be an
11 ignitable liquid present, I look for specific target
12 compounds. In the samples that I analyzed on this project,
13 they, the components -- two of the samples contained
14 components consistent with a medium to heavy petroleum
15 distillate. So I looked for components specific to medium to
16 heavy petroleum distillates. And those are listed in this
17 methodology.

18 Q Are those things listed above?

19 A Yes. They talk about separate classes, medium
20 petroleum distillate target compounds and heavy petroleum
21 distillate target compounds. But the method-- And that's
22 based on the carbon range, the number of carbons that the
23 molecule actually has. We get mixtures. We get classes of
24 compounds that are mixtures of those two, such -- and
25 therefore we call that a medium to heavy petroleum distillate.

1 Q Okay. And let's look over here at 9.3.2.3, about
2 the final identification.

3 A "The final identification shall be made by the
4 analyst on the basis of the mass spectral and relative
5 retention times of the components in question by comparison to
6 referenced materials. Again, the analyst must do a visual
7 analysis comparing the unknown sample to a referenced
8 ignitable liquid."

9 Q And, again, you did that in this case?

10 A Yes.

11 Q Turn to Page 7 here. 10.2.2.1, what is this?

12 A This is the part of the criteria for identification
13 of a distillate, a petroleum distillate, and it gives a
14 general guideline and then it gives specific compound classes
15 to look for. So we would look for, generally, the traditional
16 distillates and de-aromatized distillates. Those are compared
17 to referenced ignitable liquids in a predominant pattern
18 associated with the homologous series of n-alkanes in a
19 Gaussian distribution of peaks. Light distillates may not
20 exhibit a recognizable pattern, and may contain only one or
21 two n-alkanes.

22 Typically the light alkenes, the light petroleum
23 distillates, won't have that bell-shaped Gaussian distribution
24 that the medium to heavy ones do.

25 Q Is that something sort of like that? (Indicating.)

1 A Yes.

2 Q Is that sort of what you're talking about?

3 A Yes. It's a segmented distribution of peaks, and
4 those -- each of those peaks are an n-alkane that would be
5 present in a medium to heavy petroleum distillate.

6 Q In your analysis are you looking at a printout of
7 something like that?

8 A Yes. That's called a chromatogram. That's what
9 we're looking at.

10 Q Okay. Thank you. Thank you.

11 A Uh-huh.

12 Q I've heard you talk about alkanes and alkenes.

13 A Yes.

14 Q What are those?

15 A Alkanes are saturated hydrocarbons, a straight-chain
16 hydrocarbon, in which all of the hydrogens are present on each
17 of the carbon bonds. And then an unsaturated hydrocarbon
18 would be a hydrocarbon where there is a double or triple bond
19 in between two of the carbon molecules or carbon atoms.

20 Q And are those things that show up on a chromatogram?

21 A Yes. They may not show up in the total ion
22 chromatogram, but when we do the extracted ion profiles, I can
23 instruct the system to look specifically for the saturated
24 hydrocarbons and a variety of other compounds, including
25 alkenes.

1 Q And that's what you're looking for in your analysis;
2 you're looking for these different components. Is that -- is
3 that safe to say?

4 A Different compound classes, yes.

5 Q Okay.

6 A For the medium to heavy petroleum distillates, I
7 would look at alkanes, the alkenes, the cycloalkenes,
8 naphthenic-paraffin- -- naph- -- naphthalene, aromatic
9 compounds, and n-alkyl-cyclohexanes.

10 Q What was that last one?

11 A N-alkyl-cyclohexanes. It's one of the compound
12 classes described in the ASTM method.

13 Q Okay. Thank you. We'll continue over, I think, to
14 11.1. This is under Heading 11, "Interpretation of Results."
15 Would you take a look at that first sentence in 11.1, please?

16 A Yes. It talks about the pattern matching of
17 extracted ion profiles. Those -- the instructions of the
18 computer to only look for specific components or target
19 compound chromatograms rarely gives perfect correlation with
20 referenced ignitable liquids. That indicates that the unknown
21 samples, the debris, which may contain ignitable liquid, if it
22 does contain an ignitable liquid, it's not going to match
23 perfectly in correlation to the referenced ignitable liquid.

24 Q And that's because why?

25 A Because you have additional components contributed

1 by the matrix of the sample, and due to heat stress,
2 weathering, or microbial degradation of the ignitable liquid.

3 Q Okay. Turn the page here. Read the sentence
4 beginning with "Therefore," please, under the same section.

5 A Could you move it over just a little bit, please?

6 Q Yeah, absolutely.

7 A There we go. "Therefore it is imperative the
8 analyst have a sufficient library of ignitable liquids --
9 referenced ignitable liquids in successive stages of
10 evaporation. And a library of extracts from common substrate
11 materials containing no foreign ignitable liquids should also
12 be maintained."

13 Q Do you have such a library of referenced --

14 A Yes. I run the ignitable liquid residues on the
15 system, and also collect and maintain a library of commonly
16 found materials that I -- would be in the matrix of the
17 sample. It could be carpeting, carpet foam. It could be
18 flooring. It could be tile. It can be tile adhesives. All
19 sorts of things. And I maintain a library of those as well.

20 Q Okay. And let's see. I'll look down at 11.2.2.
21 Read this section for me, 11.2.2, or if you know what it's
22 about, tell me what that -- what that means.

23 A Okay. Well, I'll read the first part of it. It
24 describes it pretty well. "Extracts that meet the criteria
25 for heavy petroleum distillates should be reviewed carefully

1 for extraneous components"—those are the extra things that
2 are contributed by the matrix—"that elute near the
3 n-alkanes"—those are the saturated hydrocarbons—"and are the
4 result of polyolefin or high molecular weight hydrocarbon
5 decomposition (asphalt)" in parentheses. "Peaks representing
6 the corresponding 1-alkene or 1-diene, have an abundance near
7 the concentration (within one-half an order of magnitude) of
8 the alkane, should be considered as indicating the presence of
9 polyolefin or asphalt decomposition products rather than fuel
10 oil products."

11 Q Okay.

12 A And basically that -- we know that when polymers
13 burn, when asphalt burns, when those things are part of the
14 matrix, they will contribute extraneous components like
15 alkenes and aromatic hydrocarbons, they may contribute
16 alcohols, ketones, a variety of classes of components that are
17 not part of the ignitable liquid, they're just extraneous
18 components. And so in doing an identification of a heavy
19 petroleum distillate it's important to look at all of the
20 classifications of the compounds and the target compounds to
21 determine whether the compounds are present necessary to make
22 a positive identification on an ignitable liquid. Just
23 because the alkenes are present or extraneous components are
24 present does not mean that we call a sample positive. That's
25 not qualification. But it also means that if there is an

1 ignitable liquid present and it is not overwhelmed by these
2 extraneous components, we can still call the sample positive
3 if it meets the criteria described in this method.

4 Q Okay. And did you consider this section in
5 employing your analysis in this case?

6 A Yes.

7 Q Okay. Ms. Foran, have you read any articles by a
8 gentleman Mr. John Lentini?

9 A Yes, I've read some publications.

10 Q Have you read any articles that sort of relate to
11 that particular thing we just talked about?

12 A He published an article relating to asphalt smoke
13 condensates, which basically summarizes what's described here,
14 in that when you -- when asphalt is burned, or asphalt just --
15 unburned, will contribute components such as heavy petroleum
16 distillates and saturated and unsaturated hydrocarbons, yes.
17 So I've read that article.

18 Q And the -- what he's saying in his article, is that
19 basically what we've already talked about?

20 A Yes, to some degree. He's saying to be aware of
21 that contribution.

22 Q Okay. Thank you. And were you aware of that, and
23 looked at this section in your analysis? I think you answered
24 that question.

25 A Yes. From Day 1 in doing this testing in 1999, I

1 was aware of the contribution of the matrix to fire debris
2 samples. Any chemist should be aware of that that's doing
3 this type of testing.

4 Q Okay. Thank you. Done with that for now. That's
5 good. In employing the standards that we've discussed and
6 analyzing the fire debris, did you come to any conclusions in
7 this case about any of the samples?

8 A Yes. I tested nine samples. Seven of the samples
9 were negative for an ignitable liquid residue. Two of the
10 samples were positive for an ignitable liquid residue
11 identified as a medium to heavy petroleum distillate.

12 Q Okay. What role in your analysis did those negative
13 samples that you talked about play?

14 A Well, six of the samples were just negative and, you
15 know, just -- I just reported them as they were. The one
16 sample that was collected in the same vicinity as the two
17 positive samples did become relevant because I needed to use
18 that sample to verify that the matrix wasn't contributing the
19 medium petroleum distillates that I was seeing in the debris
20 samples. And so basically Sample 2 contained wood flooring
21 and debris similar to Samples 1 and 3, and yet Sample 2 did
22 not contain the medium to heavy petroleum distillate pattern
23 that I observed in the other two samples and it did not
24 contain the target compounds that I observed in the other two
25 samples.

1 Q Okay.

2 A So therefore that became my negative control, my
3 comparison sample. Sometimes I don't have a comparison sample
4 and I may have to request that the investigator go back and
5 collect one. In this case I didn't need to do that because I
6 had the sample of the similar matrix from the same area and it
7 did not contain the ignitable liquid residue, it was a
8 negative sample.

9 Q Did you-- The Sample 2-- You analyzed Sample 2?

10 A Yes, the same -- the same way. They were all
11 analyzed at that time, same time.

12 Q Did you look in the sample, Sample 2?

13 A Yes.

14 Q Did the materials in the can -- were they similar to
15 any of the materials you looked at in this case from the cans?

16 A Yes. It was the grooved wood flooring in that
17 sample container that was also present in Samples 1 and 3.

18 Q Okay. Thank you. If someone contended that you
19 misidentified a particular component as something known as
20 asphalt smoke condensate, what would your response to that be?

21 A I would say that I did not misidentify it, I
22 correctly identified the components as medium to heavy
23 petroleum distillates contributed by an ignitable liquid and
24 not by asphalt smoke condensates. Asphalt smoke condensates
25 would lack the n-alkyl-cyclohexanes as well as the branched

1 hydrocarbon composition that would be found in the ignitable
2 liquid.

3 Q Okay. What if it was a criticism that you failed to
4 consider the possibility of hardwood floor polishes or floor
5 solvents in your conclusion? How would you respond to that?

6 A Well, considering hardwood floor polishes and
7 solvents is important, but I did that. When I considered
8 Sample 2 of the similar matrix and composition and from the
9 same area, that was part of my consideration. So it did not
10 lead me to erroneously identify the ignitable liquids. I did
11 consider it. They were not present in Sample Number 2, and
12 that gave me assurance in making a determination in Samples 1
13 and 3.

14 Q Okay. Thank you. When you did the testing and
15 provided your results, did you know that Mr. Mark Sells would
16 be using those in forming his opinions in this case?

17 A I knew that it would be part of his consideration,
18 yes.

19 Q All right. I want to try to show you a few things
20 here, if I may, from Exhibit 150, some of the actual
21 chromatograms.

22 A Oh, okay.

23 MR. SCOTT: If you just want to put them in, I'll
24 agree that those are them.

25 MR. FERRELL: We've already agreed these are them.

1 MR. SCOTT: Okay. I'm just trying to speed things
2 up.

3 MR. FERRELL: I am, too, I promise.

4 BY MR. FERRELL:

5 Q Ms. Foran, can you identify what's being shown here,
6 if you can see it there?

7 A This is a summary chromatogram that I printed on
8 December 15th, 2011, following the analysis of one of the
9 samples from the -- from this particular case. I believe the
10 log number that's indicated on each chromatogram says 121133.
11 That means it was analyzed December -- it was a sample that
12 was received December 2011 and Sample Number 33. And I
13 believe that correlates to Sample 1 that was submitted.

14 Q Okay.

15 A -- that was the debris samples that were submitted.

16 Q What did the chromatograms and things on this
17 document demonstrate to you?

18 A I print this for every sample that I test, this type
19 of summary. The top line, that says "TIC," I'll -- maybe I
20 can circle this. Right there. (Indicating.) Oh, I just made
21 a mess there. But that's the total ion chromatogram. That
22 would be like the photo finish of everything crossing the
23 finish line, all the horses crossing the finish line at one
24 time. The second line are selected ion -- extracted ion
25 components for aromatic hydrocarbons. This one is for

1 saturated hydrocarbons. (Indicating.) This one is for
2 alkenes and cycloalkanes. (Indicating.) This one is for
3 naphthenic-paraffinic products. (Indicating.) And this one
4 is for oxygenates. And down at the bottom is the spectral
5 information that correlates to the flagged component at the
6 very top chromatogram. That's a spectral pattern consistent
7 with a wood terpene, like pine, limonene, other components
8 like that. And that's typical. When you have wood samples,
9 you're typically going to have that type of spectral pattern.

10 Q What about the things on this document correspond to
11 your determination that this sample was positive for medium to
12 heavy petroleum distillates?

13 A Okay. Well, you have the homologous bell-shaped
14 pattern on the selected ion profile for the hydrocarbons.
15 Each of those components, the little peaks that are present,
16 indicates a representation that an n-alkane is present. And I
17 have typically naphthenic-paraffinic components that are
18 present and the branched n-cycloalkene present as well. It's
19 important to note that it is a homologous pattern, you know,
20 that the peaks are segmented, in compliance with what we would
21 typically see in a medium to heavy petroleum distillate. And
22 the n-alkane components don't overwhelm the sample, or other
23 extraneous components. When we see samples that contain high
24 levels of decomposition of, like, styrene, polyolefins, we'll
25 see peaks elute that are near the same height as the n-alkanes

1 or are close to the same height as the n-alkanes, and that's a
2 red flag for the presence of polyolefin decomposition
3 products.

4 Q Okay. Let me quickly show you another document.
5 Let me see. There's the number there. What does that number
6 tell you this is?

7 A That's the log number and the chromatographic data
8 for Sample 3 of the samples that were submitted for this
9 project. It --

10 Q And you identify-- I'm sorry. Go ahead.

11 A It has the hydrocarbons, you know, in the
12 bell-shaped pattern. The saturated and branched hydrocarbons
13 are at a low level, but all of the distillates are at a
14 slightly lower level than the previous sample, in Sample 1.

15 Q But is this similar -- do you know whether this is
16 similar to the sample I just showed you?

17 A Yes.

18 Q Okay.

19 A I classified it as a medium to heavy petroleum
20 distillate because the carbon range indicated that.

21 Q Okay. I'll show you this next one. I'll try to
22 clear this. Look at this sample and tell me what this is.

23 A This is the chromatographic data for Sample 2, the
24 sample that was collected in the same room, with the similar
25 matrix, the wood flooring. And the top peak that I have

1 flagged here corresponds to the same spectral data down here,
2 indicating that wood terpenes are present. (Indicating.)

3 Q Okay.

4 A Okay? So that tells you something about the matrix
5 of the sample. It lacks-- This was what I used for my
6 negative control. It lacks the aromat- -- I mean, I'm sorry,
7 the n-alkane pattern, the bell-shaped pattern, the branched
8 hydrocarbons, and actually the naphthalenes present to -- you
9 know, they're not present in this sample. They were present
10 in the other samples.

11 Q So is the characteristics shown here on this
12 document, are they different than what -- the other two we
13 just looked at?

14 A Yes. The sample was determined to be negative for
15 any ignitable residue.

16 Q Okay. Thank you.

17 MR. FERRELL: Just a minute, please.

18 (Off-the-record discussion.)

19 THE COURT: How much longer, Counsel?

20 MR. FERRELL: I think five, ten minutes --

21 THE COURT: Okay.

22 MR. FERRELL: -- I think. I'll try to move it along.

23 THE COURT: Well, I'm concerned about the cross on
24 this witness, and this witness would have to come back on
25 Tuesday if we cannot finish.

1 MR. SCOTT: Your Honor, I'll finish my cross in less
2 than five minutes.

3 THE COURT: Hurry.

4 MR. FERRELL: I will. I'll do my very best.

5 BY MR. FERRELL:

6 Q Ms. Foran, is the information we've looked at and
7 you've talked about still on your computer today?

8 A Yes, all the files are stored electronically.

9 Q Can anybody who wants to, you know, with your
10 permission, look at it and do any comparisons they want?

11 A You actually have to have the Varian software. The
12 software is proprietary. With the specific analytical
13 instrument, you have to purchase the Varian software in order
14 to extract the same data.

15 Q Okay. Did you print all the stuff out initially
16 that's in your computer?

17 A No. I print out a summary of each of the items, and
18 then I print out a comparison of the chromatograms that I may
19 call positive to the referenced ignitable liquid or one of the
20 referenced ignitable liquids that I use. So I print out
21 summaries of things. I don't print out everything that I
22 looked at.

23 Q Those things we looked at, were those summaries?

24 A Yes.

25 Q Ms. Foran, are you familiar with the opinions of

1 Mr. John Lentini in this case?

2 A Yes, I understand he has a disagreement with me,
3 with my determinations.

4 Q And what is the nature of his disagreement, as you
5 understand it?

6 MR. SCOTT: Your Honor, I'm going to object. I don't
7 know how she can object and testify about opinions that haven't
8 even been given yet in the case.

9 THE COURT: I don't know if she shows. If she
10 doesn't know anything about them, she's not going to be able to
11 testify.

12 What do you say, Counsel?

13 MR. SCOTT: You can't put on rebuttal evidence in the
14 case in chief.

15 MR. FERRELL: I think she has reviewed the -- an
16 opinion of Mr. Lentini about this case; and if she has, she may
17 be able to testify about those particular opinions.

18 MR. SCOTT: And I think she also would have had to
19 supplement her expert disclosures to let me know about those
20 opinions.

21 THE COURT: Well, I think she's going to have to --
22 she can testify in rebuttal, but she has to wait until
23 Mr. Lentini speaks.

24 MR. FERRELL: Fair enough.

25 THE COURT: I know that-- That's just kind of the

1 way the rule works. And it's designed to be fair to both
2 sides. So we're not --

3 MR. FERRELL: Just trying to move things along, Your
4 Honor.

5 THE COURT: I understand --

6 MR. SCOTT: I know. I just don't want to hear stuff
7 for the first time --

8 THE COURT: -- but it can't be moved along at the
9 expense of changing the order in which it has to be presented.
10 So we've just got to go with the standard order. I'm sorry.

11 BY MR. FERRELL:

12 Q Ms. Foran, do you have confidence --

13 THE COURT: Sustained.

14 MR. FERRELL: Thank you.

15 BY MR. FERRELL:

16 Q Ms. Foran, do you have confidence in your
17 conclusions that you made in this case?

18 A Yes, I do.

19 MR. FERRELL: I think that's all I have, Your honor.

20 THE COURT: Thank you. You may cross-examine.

21 CROSS-EXAMINATION

22 BY MR. SCOTT:

23 Q Don't worry. All this stuff's not for you.
24 (Indicating.) Ms. Foran, I'm just a poor country boy from
25 West Tennessee, and I'm not sure I understood everything or

1 that I do understand everything. I'm just going to be frank
2 with you. Okay?

3 A Certainly.

4 Q I just have a few questions. Okay?

5 A Sure.

6 Q You work for EFI?

7 A Yes.

8 Q EFI was hired by Cincinnati Insurance Company?

9 A Yes.

10 Q Cincinnati Insurance Company is paying you to come
11 here and testify today?

12 A They haven't paid me as yet, but I hope they will.

13 Q It's certainly your intent to be paid and
14 compensated for your time?

15 A It is, yes.

16 Q Not saying there is anything wrong with that. I'm
17 just stating the obvious, right?

18 A Yes, sir.

19 Q Okay. The only articles you published relate to the
20 pharmaceutical industry?

21 A Oh, yes.

22 Q And you have not published any articles related to
23 detection or testing of ignitable liquid residue?

24 A No, I have not.

25 Q Okay. ASTM stands for?

1 A American Society for Testing and Materials.

2 Q And that provides the standards for which you do the
3 testing, right?

4 A Yes, that organization provides the standards.

5 Q All right. And those standards included 1618 which
6 Mr. Ferrell has just walked us through, right?

7 A Yes, sir.

8 Q And as part of that it included 11.2.2, right?

9 A I'm sorry. What was the question?

10 Q Maybe I'm not talking loud enough. It included
11 Section 11.2.2?

12 A Yes, it does.

13 Q And Section 11.2.2, you're aware, came from the
14 research conducted by John Lentini and after he had completed
15 his research and wrote his article?

16 A No, I believe it was -- the awareness of matrix
17 contributions were present in the ASTM method long before that
18 article was published by Mr. Lentini.

19 Q Section 11.2.2.

20 A I know that he was a contributor on the committee --

21 Q Okay.

22 A -- but whether that was the sole source of the
23 information, I don't have that available to me, I don't know
24 that.

25 Q Okay. You never spoke to the Banks --

1 A No.

2 Q -- Mr. and Mrs. Banks?

3 A No, I have not.

4 Q And you're one of the witnesses in this case; you
5 normally wouldn't talk to the insured, would you?

6 A I don't ever talk to the insured.

7 Q All right. You've never been to their house?

8 A No, sir.

9 Q You don't know what type of shingles were on their
10 house?

11 A No, I do not.

12 Q All right. You don't know what kind of hardwood
13 floors they had?

14 A I'm not-- What brand, are you asking me?

15 Q What type of wood, anything like that.

16 A Only by the evidence of the wood samples that I
17 received in the debris.

18 Q You know they're wood, right?

19 A Yes.

20 Q And that they contained terpenes, I think you said?

21 A Wood terpenes, yes.

22 Q I think you said that's just something normal that
23 you're going to find in wood?

24 A Yes.

25 Q You're not saying that terpenes was something bad

1 that they did?

2 A No, it's consistent with the matrix of the sample.

3 Q Okay. I just want to make sure. Terpenes are not
4 bad?

5 A No, they're not bad.

6 Q And you don't have any information as to when the
7 hardwood floors were refinished last, right?

8 A No, I don't.

9 Q Okay. The Varian, when I first heard about this
10 machine, and when I heard about test samples, I always assumed
11 there was a button, you dump this stuff in here like this, and
12 you pressed a button, and it spit out and said boop, boop,
13 boop, positive, or neh, neh, negative. (Indicating.) That's
14 not how this works.

15 A No, it is not.

16 Q It's you get the data, and then the real work is
17 you, the person, and you look at it and you come up with an
18 opinion?

19 A I think it's more than just me doing the work. The
20 analytical instrument has a lot of criteria for how it is used
21 and maintained, and the sample. The test methods that are
22 used, they go -- they are an important contribution in making
23 the determination.

24 Q I don't dispute that.

25 A Yes.

1 Q Okay. Just real easy, though. Answer my question.
2 You get the data from the machine, and you are the person that
3 makes the determination as to whether the sample is positive
4 or negative?

5 A Yes, sir, I make the final determination, yes.

6 Q Okay. In this case you told us earlier you did not
7 request any comparison samples from Mark Sells, right?

8 A That's correct.

9 Q And he sent you no comparison samples, right?

10 A They were not submitted as a comparison sample.
11 They were actually submitted as being requested for analysis
12 for ignitable liquids. But since it did not contain the
13 medium to heavy petroleum distillates, I can use that as a
14 comparison sample.

15 Q Okay. And all the samples he sent you were from
16 debris and ash and wood that were all from the Banks' home?

17 A To my knowledge, yes.

18 Q And there weren't -- there were no undamaged
19 portions of the Banks' flooring in those samples, correct?

20 A They were at varying -- varying degrees of damage.

21 Q Okay. If he told us earlier that he took all the
22 samples from places that had been damaged where he suspected
23 that ignitable liquid residue was, would you disagree with
24 him?

25 A Could you please repeat that question?

1 Q If Mr. Sells testified earlier today that he took
2 the samples from places where he believed that ignitable
3 liquid residue existed—just like you said, they were all
4 submitted so that they could be tested for ignitable liquid
5 residue—you don't have any additional information about the
6 specific areas where those samples were taken?

7 A No. I don't participate in the cause and origin
8 investigation or how he determines where to collect the
9 samples.

10 Q Asphalt shingles contain medium to heavy petroleum
11 distillates?

12 A They can contain medium to heavy petroleum
13 distillates.

14 Q Hardwood flooring finishes contain medium to heavy
15 petroleum distillates?

16 A Yes, particularly medium petroleum distillates.

17 Q Hardwood floor finishings can remain in the wood for
18 an unspecified amount of time? I believe you agreed with me
19 about that during your deposition.

20 A Yes. That's true.

21 Q And that goes along with an article that Mr. Lentini
22 authored?

23 A Yes, I believe he did publish something on that.

24 MR. SCOTT: Thank you.

25 THE WITNESS: You're welcome.

1 MR. FERRELL: One question.

2 THE COURT: Come on. Go for it.

3 REDIRECT EXAMINATION

4 BY MR. FERRELL:

5 Q Ms. Foran --

6 A Yes, sir.

7 Q -- did you distinguish between the types of medium
8 to heavy petroleum distillates in the wood and the shingles in
9 this case?

10 A I think your question -- I think you're asking me
11 did I differentiate -- did I determine whether the medium to
12 heavy petroleum distillates were -- could be attributed to
13 wood or shingles or whether they could be attributed to the
14 ignitable liquid, whether they may have been contributed by
15 that.

16 Q Yes.

17 A Yes, I did consider that.

18 MR. FERRELL: Okay. Thank you.

19 THE WITNESS: You're welcome.

20 THE COURT: The good news, you can step down. Maybe
21 even better, they may tell you to come back.

22 THE WITNESS: Thank you.

23 (Witness excused.)

24 THE COURT: Now, well, it seems to be probably time
25 for -- not the next witness. Do you-all agree? In agreement

1 we probably need to call it quits for the day?

2 Ladies and gentlemen of the jury, once again, you
3 know you're hearing the case, it's not through. Don't talk
4 about it yet among yourselves or with others. Don't do any
5 investigation. Certainly don't try to get a chemistry degree
6 tonight on the web. Just accept the testimony that you've
7 heard. And I hope you-all have a good weekend.

8 And, my goodness, remember, we're not here Monday.
9 So don't come. And if there's anything back there in the jury
10 room that needs to be in the freezer, we'll put it in there.

11 Anything further you-all need to advise the jurors,
12 anything in particular, before they leave?

13 MR. MCWHERTER: No, Your Honor.

14 MR. CHASTAIN: No, Your Honor.

15 THE COURT: All right. The jury, then, can be
16 excused. You-all can come back -- we'll see you on Tuesday at
17 9:00. I thank you for your attention. I noticed you were all
18 very attentive, and I thank you, as do the parties and the
19 lawyers.

20 (The jury exited the courtroom, and the proceedings
21 continued as follows:)

22 THE COURT: Counsel, I'm not real sure when we're
23 going to be ready to talk about jury charges, but, you know,
24 sometime next week, after -- the end of the day, we'll do that,
25 have a charge conference and discuss what we've come up with.

1 Is there anything further that needs to be dealt
2 with here today? About-- I'm not-- You-all don't know,
3 perhaps, how many. I'm trying to figure out how many more
4 witnesses are likely to be for Cincinnati before we get to the
5 Banks' side. So we're going to --

6 MR. CHASTAIN: We are hoping that we will still
7 finish Monday. We went a little bit longer Tuesday. I'm
8 hoping to finish Monday.

9 THE COURT: Yeah, I understand.

10 MR. CHASTAIN: But I think the next day of trial we
11 are really going to try to push to finish our proof.

12 THE COURT: Okay. It is possible.

13 MR. CHASTAIN: Still possible.

14 THE COURT: I guess my question at this point, we are
15 at Day 4, is it looking like we're on schedule, behind
16 schedule, what?

17 MR. McWHERTER: I think we're okay. They've put on a
18 lot of fact witnesses in our proof that we're obviously not
19 going to recall.

20 THE COURT: Right. There's a lot of the ground in
21 your case gets plowed here, because of the way it's set up.
22 Okay. Well, that's fine. Anybody need anything? I hope
23 you-all have a very good weekend, all of you. I know it's--
24 These are difficult things. It's a difficult case and -- for
25 all, I'm sure. And I hope you-all have a very nice weekend.

1 I'll see you on Tuesday. Nothing further for either side?

2 MR. McWHERTER: Thank you, Judge.

3 MR. CHASTAIN: Thank you, Judge.

4 THE COURT: We're adjourned for the day. You-all
5 have a good weekend.

6 MR. CHASTAIN: You, too.

7 (Evening recess.)

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